					EPARTMENT O		<b>UTAH</b> JRAL RESOURO AS AND MININ			AMENI	FOI DED REPO	RM 3		
		АРГ	PLICATION FO	R PERMI	T TO DRILL				1. WELL NAME and		<b>₹</b> 921-26B-H	 Z		
2. TYPE	OF WORK	DRILL NEW WELL	REENTER	P&A WELL (	DEEPEN	WELL (	)		3. FIELD OR WILDO	AT NATURAL	BUTTES			
4. TYPE					ne Well: NO		5. UNIT or COMMUNITIZATION AGREEMENT NAME							
6. NAME	OF OPERATO	R	ERR-MCGEE OIL 8				7. OPERATOR PHONE 720 929-6515							
8. ADDR	ESS OF OPER		P.O. Box 173779,				9. OPERATOR E-MAIL julie.jacobson@anadarko.com							
	ERAL LEASE N L, INDIAN, O	R STATE)		11. MIN	NERAL OWNERS	SHIP AN	P 12. SURFACE OWNERSHIP							
13. NAM		T ST ML 22934 E OWNER (if box	12 = 'fee')	TEDERA	INDIA	***	STATE	100	14. SURFACE OWN	-				
15. ADD	RESS OF SUR	FACE OWNER (if	box 12 = 'fee')						16. SURFACE OWN	R E-MA	IL ( <mark>if</mark> box	12 = 'fe	ee')	
	AN ALLOTTEI 2 = 'INDIAN'	OR TRIBE NAM	E		LE FORMATIO	NS	PRODUCTION F	FROM NO	19. SLANT VERTICAL DIR	ECTIONA	AL 💮 🕴	IORIZON	ITAL 📵	
20. LOC	ATION OF W	ELL		QTR-	-QTR S	ECTION	TOWNSHIP	R.A	NGE	ME	RIDIAN			
LOCATI	ON AT SURFA	CE	681	FNL 1512	FEL	NW	NE	26	9.0 S	21	0 E		S	
Top of U	Jppermost Pr	oducing Zone	460	SW	SE	26	9.0 S	21	.0 E		S			
At Total Depth 460 FSL 1780 FEL							SE	26	9.0 S	21	21.0 E S		S	
21. COU	NTY	UINTAH				460	EASE LINE (Fe		23. NUMBER OF AC	RES IN E		UNIT		
					TANCE TO NEA d For Drilling o			POOL	26. PROPOSED DEP		TVD: 461	0		
27. ELEV	ATION - GRO			28. BO	ND NUMBER				29. SOURCE OF DRI	PROVAL	NUMBER	IF APPI	LICABLE	
		4917		Ho	le, Casing, a	220135 nd Cen	142 nent Informa	ition		43-8	496			
String	Hole Size	Casing Size	Length	Weight	Grade & Th	hread	Max Mud V	Vt.	Cement		Sacks	Yield	Weight	
SURF	12.25	9.625	0 - 2653	36.0	J-55 LT	&C	8.4					15.6		
II	8.75	7	0 - 5193	26.0	P-110 L	T9.C	10.5	Dr	Type V emium Lite High Str	onath	300	1.18	15.6 12.5	
	6.73	/	0 - 3193	20.0	P-110 L	.TAC	10.5	FI	50/50 Poz	engui	250	1.25	14.3	
L1	6.125	4.5	3878 - 9261	11.6	P-110 L	T&C	9.2		No Used		0	0.0	0.0	
									No Used		0	0.0	0.0	
				•	АТТ	ГАСНМ	ENTS							
	VERIFY	THE FOLLOWI	NG ARE ATTAC	HED IN A	ACCORDANC	E WITI	H THE UTAH (	OIL AND	GAS CONSERVATI	ON GEI	NERAL R	ULES		
<b>⊮</b> w	ELL PLAT OR	MAP PREPARED	BY LICENSED SU	JRVEYOR (	OR ENGINEER		COMPLETI	E DRILLIN	G PLAN					
AF	FIDAVIT OF	STATUS OF SURF	ACE OWNER AGI	REEMENT (	IF FEE SURFAC	CE)	FORM 5. II	F OPERATO	OR IS OTHER THAN TI	HE LEAS	E OWNER			
DI DRILLED		SURVEY PLAN (IF	DIRECTIONALL	Y OR HOR	IZONTALLY		<b></b> TOPOGRAF	PHICAL MA	AP					
NAME A	ndy Lytle			TITLE Re	gulatory Analyst	t		PHONE	720 929-6100					
SIGNAT	URE			DATE 10/	04/2011			EMAIL	andrew.lytle@anadarkc	.com				
	mber assign 04752050			APPROV	AL			B	00.cyill					
							Permit Manager							

Maverick 921-26B-HZ Drilling Program
1 of 8

#### Kerr-McGee Oil & Gas Onshore. L.P.

#### MAVERICK 921-26B-HZ

Surface: 681 FNL / 1512 FEL NWNE BHL: 460 FSL / 1780 FEL SWSE

Section 26 T9S R21E

Unitah County, Utah

Mineral Lease: UT ST UO 01194 ST/UT ST ML 22934

#### **ONSHORE ORDER NO. 1**

#### **DRILLING PROGRAM**

### 1. & 2. <u>Estimated Tops of Important Geologic Markers:</u> <u>Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:</u>

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	1518	Water
Birds Nest	1719	Water
Mahogany	2202	Water
Uteland Butte	4700	Oil/Gas
TVD	4610	
TMD	9261	

#### 3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please refer to the attached Drilling Program

#### 4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program

#### Drilling Fluids Program:

Please refer to the attached Drilling Program

#### 5. <u>Evaluation Program:</u>

Please refer to the attached Drilling Program

Maverick 921-26B-HZ Drilling Program 2 of 8

#### 7. <u>Abnormal Conditions</u>:

Maximum anticipated bottom hole pressure calculated at 2,028 psi 4610' TVD, approximately equals

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 1,263 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

#### 8. <u>Anticipated Starting Dates:</u>

Drilling is planned to commence immediately upon approval of this application.

#### 9. <u>Variances:</u>

Please refer to the attached Drilling Program. Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- · Blowout Prevention Equipment (BOPE) requirements;
- · Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

#### Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may

Maverick 921-26B-HZ Drilling Program
3 of 8

be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12 1/4 inch hole for the first 200 feet, then will drill a 11inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

#### Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

#### Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

#### Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KM well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and

on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Maverick 921-26B-HZ Drilling Program
4 of 8

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

#### Variance for FIT Requirements

KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

#### Conclusion

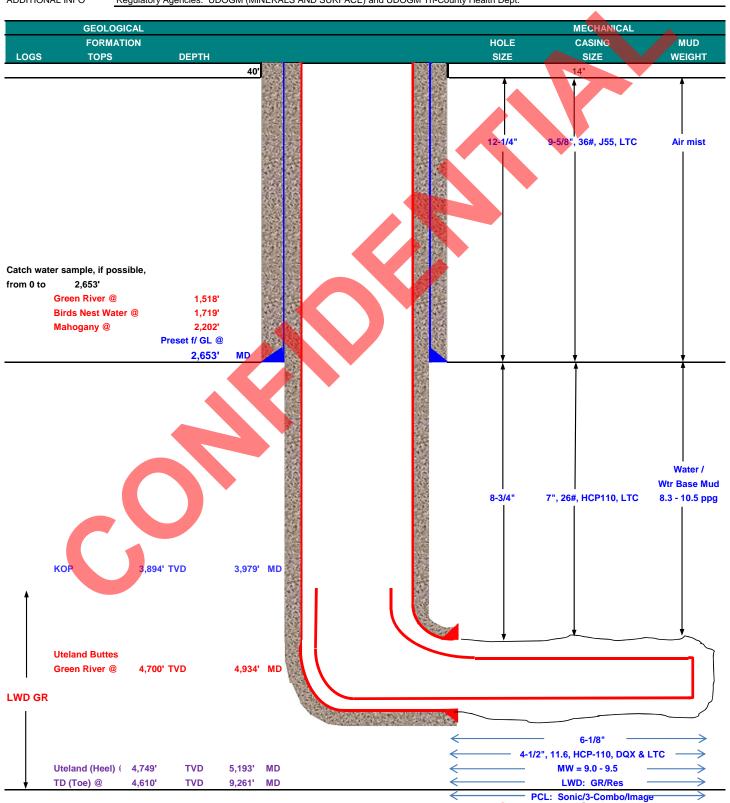
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

#### 10. <u>Other Information:</u>

Please refer to the attached Drilling Program.

# KerrNcGee Kerr McGee Oil and Gas Onshore LP DRILLING PROGRAM

COMPANY NAME Kerr McGee Oil and Gas Onshore LP October 3, 2011 Maverick 921-26B-HZ 9,261' MD KB 15' WELL NAME TVD 4,610' **FIELD** Natural Buttes COUNTY Uintah STATE Utah **ELEVATION** 4,917' GL KB 4,932' SURFACE LOCATION NWNE Sec 26, T9S, R21E 681' FNL 1512' FEL SWSE Sec 26, T9S, R21E 460' FSL 1780' FEL BTM HOLE LOCATION 40.012395 -109.514219 NAD 27 Surface 40.001057 -109.515154 NAD 27 BHL Latitude: Longitude OBJECTIVE ZONE(S) Uteland Buttes--Green River Regulatory Agencies: UDOGM (MINERALS AND SURFACE) and UDOGM Tri-County Health Dept ADDITIONAL INFO



**RECEIVED:** October 04, 2011

## Kerr McGee Oil and Gas Onshore LP DRILLING PROGRAM

#### CASING PROGRAM

									DESIGN FACTO	RS
	SIZE	INTE	RVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-	40'							
								3520	2020	453000
SURFACE	9-5/8"	0	to	2,653'	36.00	J55	LTC	2.79**	1.63	5.50
								9950	7800	278000
INTERMEDIATE	7"	0	to	5,193'	26.00	HCP-110	LTC	4.37	3.43	2.63
								10690	8650	367000
PRODUCTION	4-1/2"	3,879'	to	5,293'	11.60	HCP-110	DQX	54.49	3.80	5.22
_								10690	8650	279000
	4-1/2"	5,293'	to	9,261'	11.60	HCP-110	LTC	>100	3.80	6.06

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)
- 2) MASP (Prod Casing) = Pore Pressure at TD (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 9.5 ppg) .22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

MASP 1263 psi

\*\* Burst SF is low but casing is much stronger than formation at 2653'. EMW @ 2653' for 3520# is 25.5 ppg or 1.33 psi/ft.

#### **CEMENT PROGRAM**

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE LE	AD 500	Premium cmt + 2% CaCl <sub>2</sub>	215	60%	15.60	1.18
Option 1		+ .25 pps flocele				
TOP OUT CMT	(1) 200	20 gals sodium silicate + Premium cmt	50		15.60	1.18
		+ 2% CaCl <sub>2</sub> + .25 pps flocele				
TOP OUT CMT	(2) as required	Premium cmt + 2% CaCl <sub>2</sub>	as req.		15.60	1.18
SURFACE		NOTE: If well will circulate water to surface, or	ption 2 wil	be utilized		
Option 2	AD 2,153'	65/35 Poz + 6% Gel + 10 pps gilsonite	510	35%	12.60	1.81
		+.25 pps Flocele + 3% salt BWOW				
Т	AIL 500	Premium emt + 2% CaCl <sub>2</sub>	180	35%	15.60	1.18
		+ .25 pps flocele				
TOP OUT C	MT as required	Premium cmt + 2% CaCl <sub>2</sub>	as req.		15.60	1.18
INTERMEDIATE LE	AD 3,479'	Premium Lite II + 3% KCl + 0.25 pps	300	10%	12.50	1.98
		celloflake + 5 pps gilsønite + 10% gel				
		+ 0.5% extender				
T.	AIL 1,714'	50/50 Poz/G + 10% salt + 2% gel	250	10%	14.30	1.25
		+.1% R-3				
PRODUCTION LE	AD	No cement will be used on Packers Plus Completion System				
T.	AIL					

\*\*Excess applied to the Lead slurry is calculated on Open hole Volume only.

\*Substitute caliper hole volume plus 5% excess for LEAD if accurate caliper is obtained

\*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

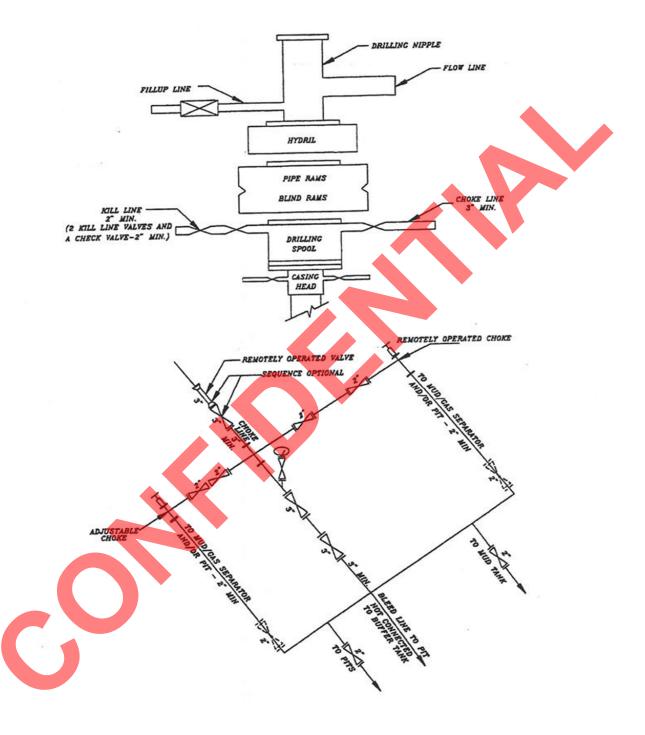
#### FLOAT EQUIPMENT & CENTRALIZERS

	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
INTERMEDIATE	Float shoe, 2 jt w/ centralizer on each, float collar. 1 centralizers on next 23 joints, total 25 centralizers
INTERWIEDIATE	Tiout shot, 2 jt W centralizer on each, hour contain. The centralizers on hear 20 joints, total 20 centralizers
PRODUCTION	Packer Plus completion system

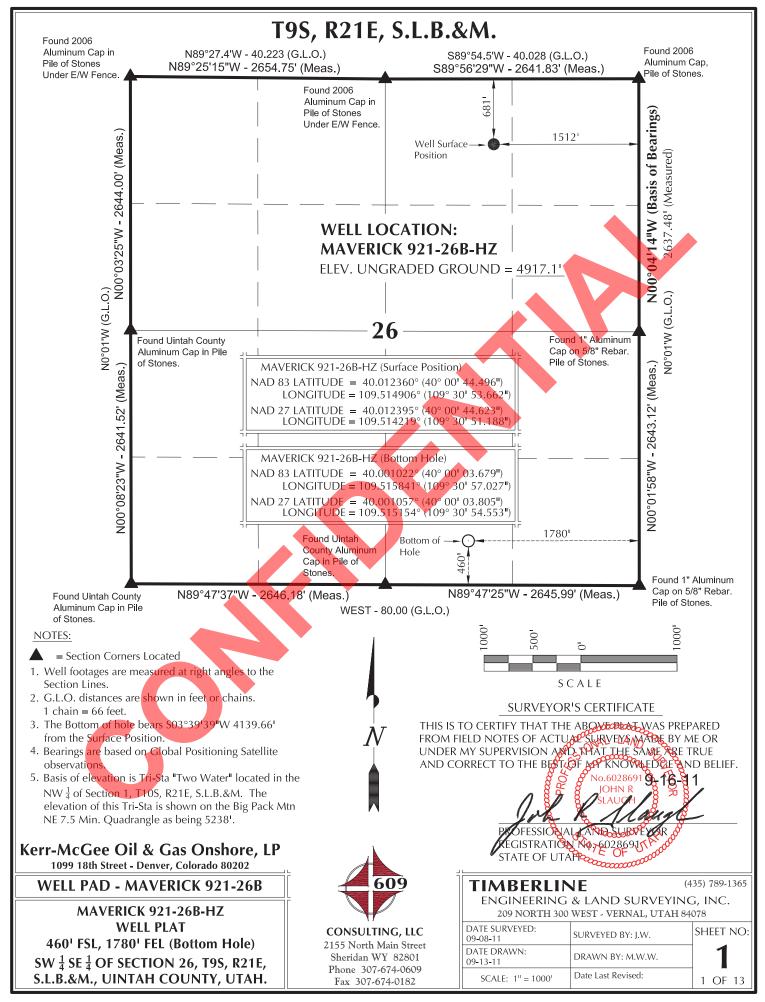
#### ADDITIONAL INFORMATION

	Test casing head to 750 p	si after installing. Test surface casing to 1,500 psi prior to drilling out. Test interme	ediate casing to 4500 psi pri	or to drill out.					
	John Huycke  LING SUPERINTENDENT:  DATE:								
BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & lower kelly valves.  Survey with MWD every 100' during planned angle changes and every 500' when maintaining angle.  Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.  DATE: 9/29/2011									
	& lower kelly valves.								
	Survey with MWD every 1	00' during planned angle changes and every 500' when maintaining angle.							
	Most rigs have PVT System	m for mud monitoring. If no PVT is available, visual monitoring will be utilized.							
DRILLING	ENGINEER:	<u></u>	DATE:	9/29/2011					
		John Huycke							
DRILLING	SUPERINTENDENT:		DATE:						
		Lovel Young							

EXHIBIT A
MAVERICK 921-26B-HZ



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK



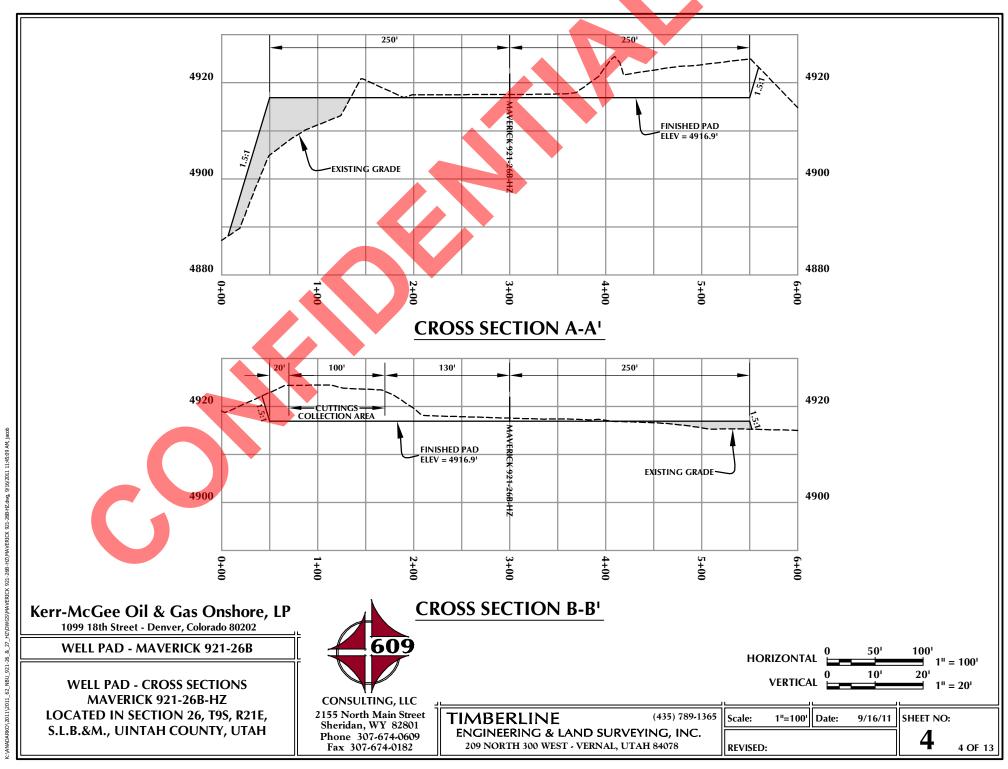
WELL NAME         SURFACE POSITION         BOTTOM HOLE           NAD83         NAD27         NAD83         NAD27								227	I	
WELL NAME	NAE LATITUDE	D83 LONGITUDE	NAI LATITUDE	LONGITUDE	FOOTAGES	NA LATITUDE	D83 LONGITUDE	LATITUDE	D27 LONGITUDE	FOOTAGES
MAVERICK	40°00'44.496"		40°00'44.623"		681' FNL	40°00'03.679'				
	40.012360°	109.514906°	40.012395°	109.514219°	1512' FEL	40.001022°	109.515841°	40.001057°	109.515154°	1780' FEL
	40°00'45.154" 40.012543°	109°30'52.691" 109.514636°	40°00'45.281" 40.012578°	109°30'50.217" 109.513949°	615' FNL 1436' FEL					
	E COORDINAT	1	10.012370	109.913949	1430 TEL					
	Position to Botto									
WELL NAME	NORTH	EAST								
MAVERICK 921-26B-HZ	-4,131.2	-264.31								
				° CO	139.66 ole)	BASIS OF ETHE NE 1/4 S.L.B.&M. GLOBAL P	BEARINGS IS TH 4 OF SECTION WHICH IS TAK OSITIONING S TIONS TO BEAI	HE EAST LINE ( 26, T9S, R21E, EN FROM ATELLITE	OF .	
							100	50'		100.
Kerr-McC		Gas Ons						SCAL	E	
	th Street - De	nver, Colorado								
		VEDICI/ 00	1-26B	#	609		IMBERL Engineerin			35) 789-1365
	AD - MA	VERICK 92								
WELL P									SURVEYING RNAL, UTAH 84	
WELL P	AD INTE	RFERENC	E PLAT	CONS	ULTING, LL	DAT	209 NORTH :	300 WEST - VEF	RNAL, UTAH 84	
WELL P	AD INTE - MAVERI	RFERENC CK 921-26E	E PLAT B-HZ	2155 No	ULTING, LLO orth Main Stre	C DAT	209 NORTH : TE SURVEYED: 08-11	SURVEYED F	RNAL, UTAH 84 BY: J.W.	078
WELL P. WELL LOCATEI	AD INTE - MAVERI D IN SECT	RFERENC	E PLAT B-HZ S, R21E,	2155 No Sherid		C DAT 09-0	209 NORTH :	300 WEST - VEF	RNAL, UTAH 84 BY: J.W.	078

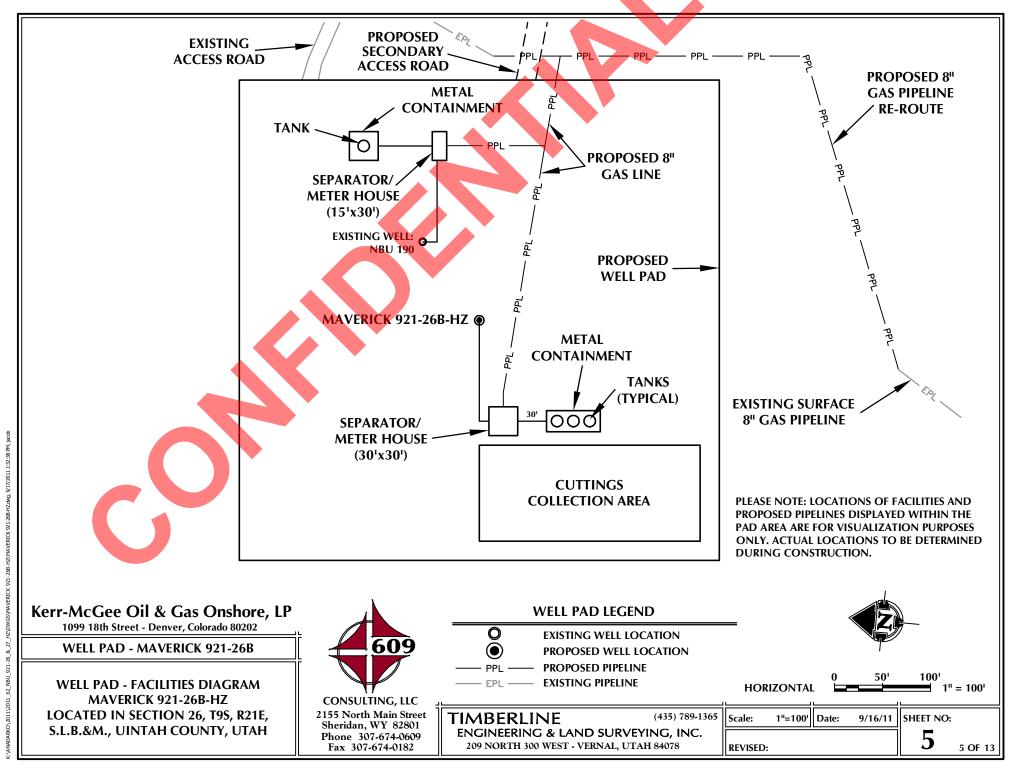
Phone 307-674-0609 Fax 307-674-0182

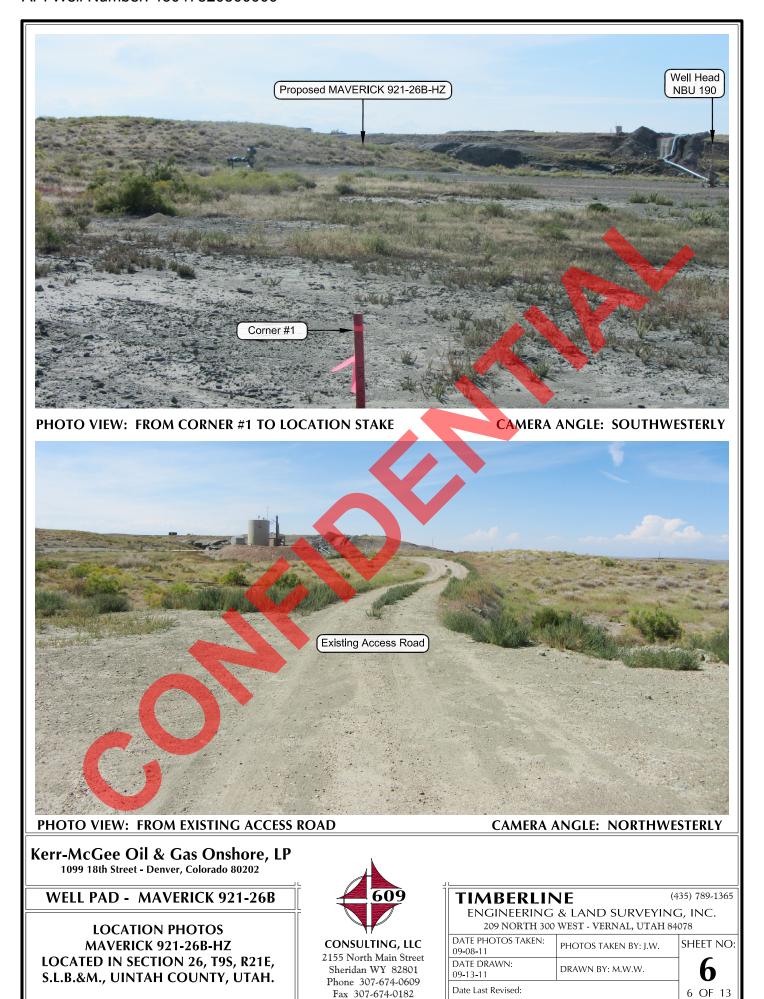
209 NORTH 300 WEST - VERNAL, UTAH 84078

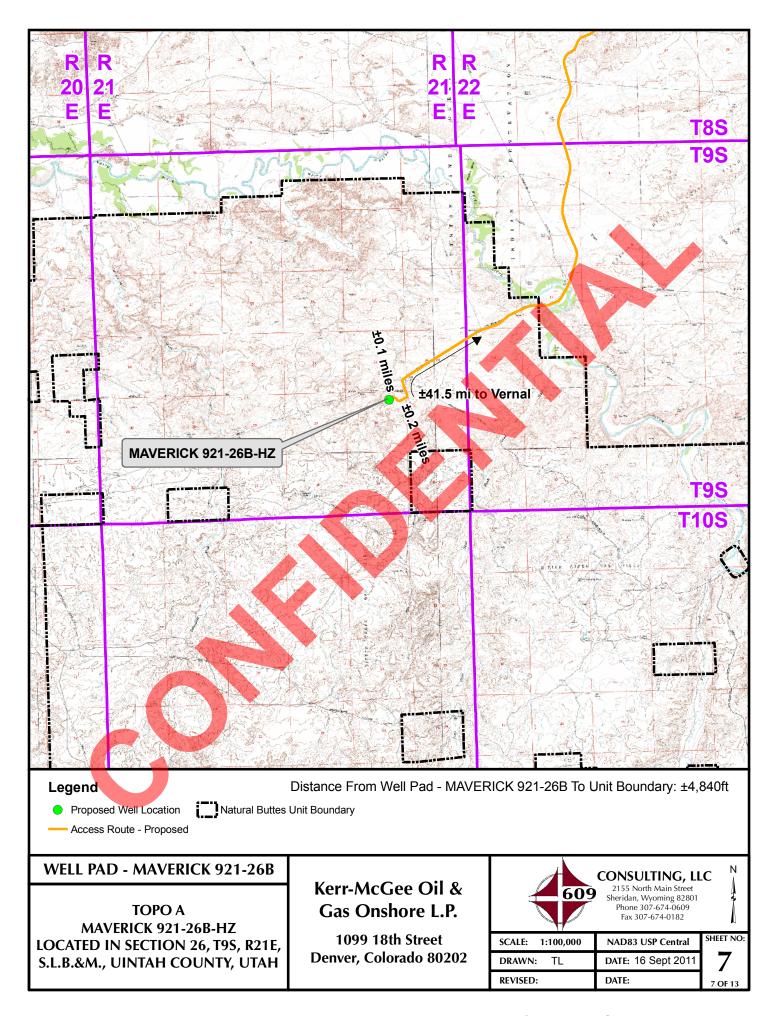
3 OF 13

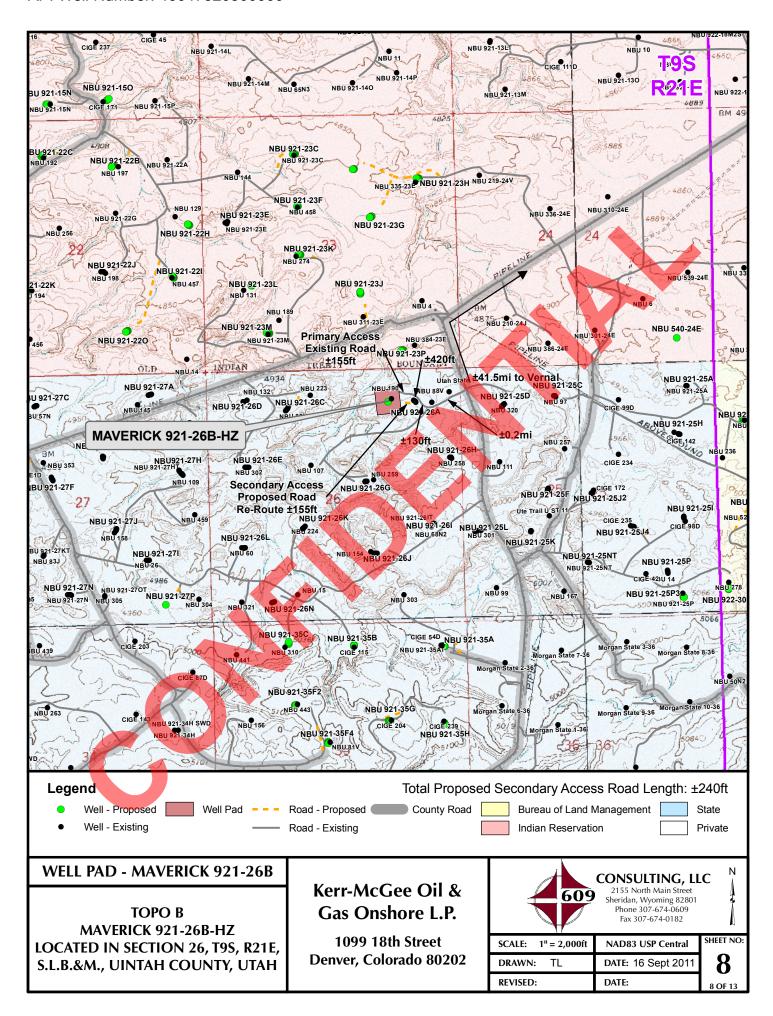
**REVISED:** 

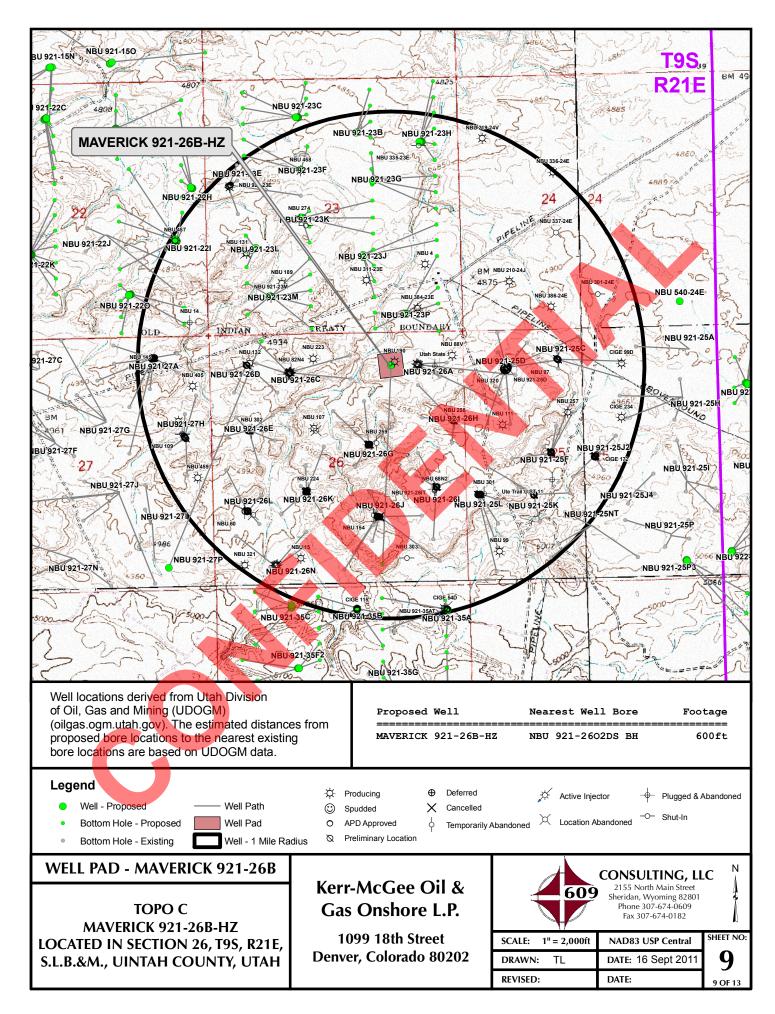


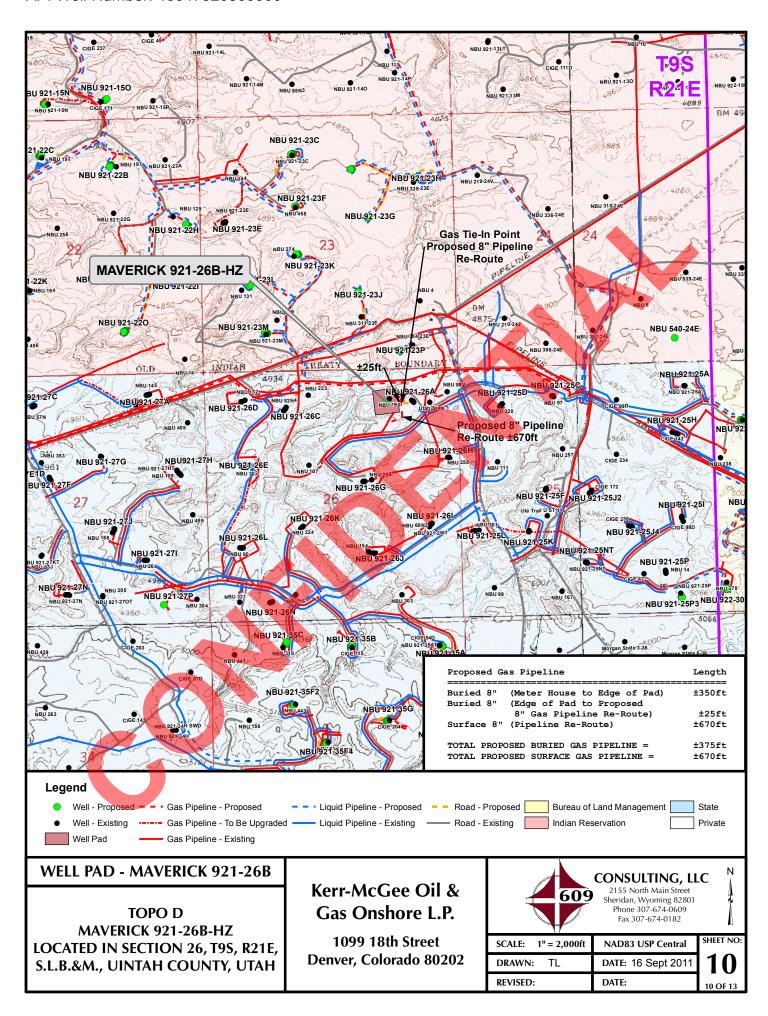


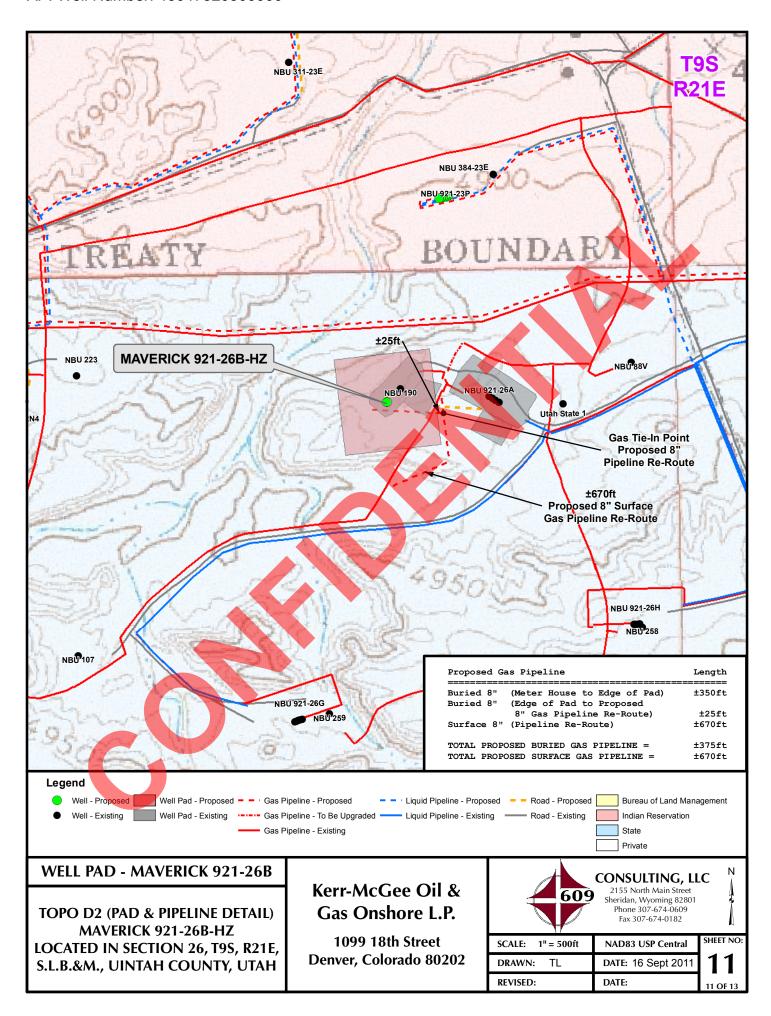


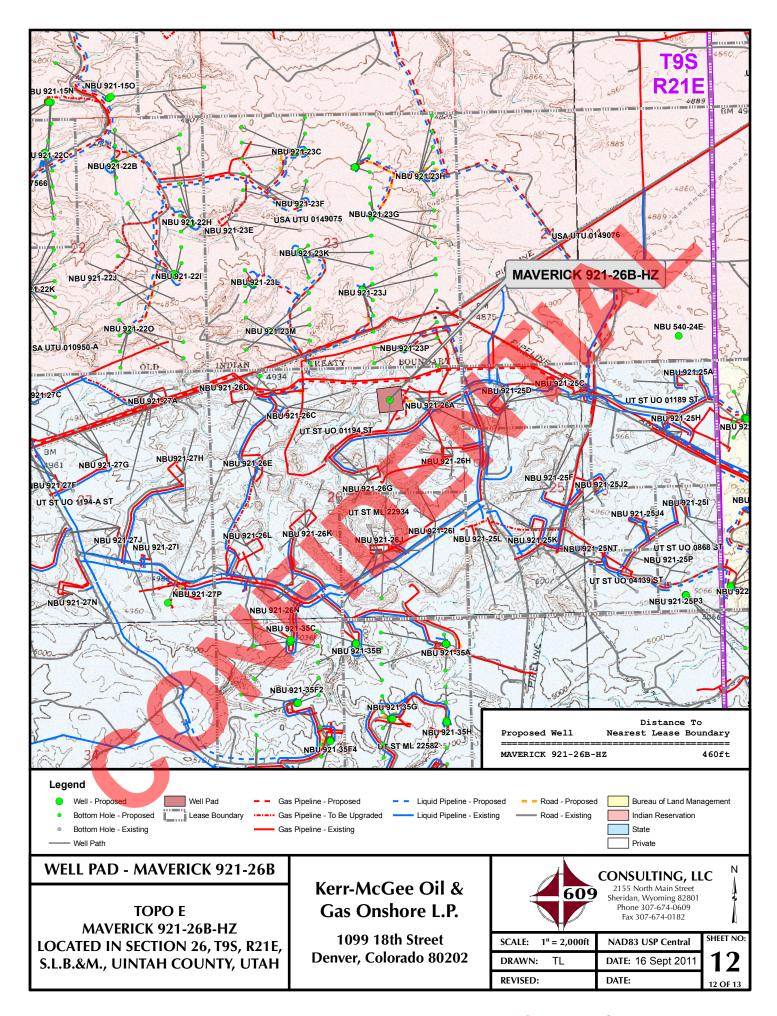












Kerr-McGee Oil & Gas Onshore, LP WELL PAD – MAVERICK 921-26B WELL – MAVERICK 921-26B-HZ Section 26, T9S, R21E, S.L.B.&M.

From the intersection of U.S. Highway 40 and 500 East street in Vernal, Utah, proceed in an easterly then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45. Exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly direction along the Glen Bench Road approximately 18.0 miles to a service road to the southwest. Exit right and proceed in a southwesterly direction along the service road approximately 0.2 miles to a second service road to the northwest. Exit right and proceed in a northwesterly direction along the second service road approximately 130 feet to the NBU 921-26A well pad. Continue through the NBU 921-26A well pad approximately 420 feet to a third service road to the northwest. Continue on the third service road approximately 155 feet to the proposed well location.

Total distance from Vernal, Utah to the well location is approximately 41.8 miles in a southerly direction.



SHEET 13 OF 13



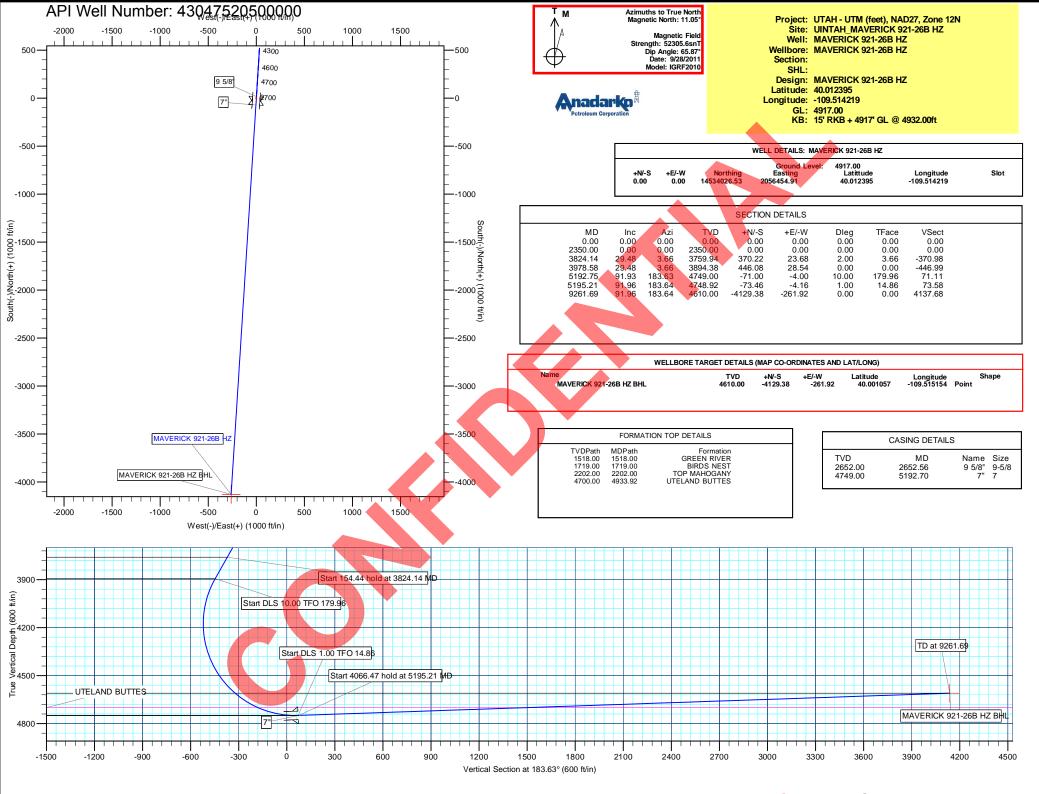
UTAH - UTM (feet), NAD27, Zone 12N UINTAH\_MAVERICK 921-26B HZ MAVERICK 921-26B HZ

**MAVERICK 921-26B HZ** 

Plan: MAVERICK 921-26B HZ

## **Standard Planning Report**

28 September, 2011



Planning Report

edmp Database:

Company: US ROCKIES REGION PLANNING

Project: UTAH - UTM (feet), NAD27, Zone 12N Site: UINTAH\_MAVERICK 921-26B HZ

Well: MAVERICK 921-26B HZ

Wellbore: MAVERICK 921-26B HZ MAVERICK 921-26B HZ Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

System Datum:

**Survey Calculation Method:** 

Well MAVERICK 921-26B HZ 15' RKB + 4917' GL @ 4932.00ft 15' RKB + 4917' GL @ 4932.00ft

Minimum Curvature

Project UTAH - UTM (feet), NAD27, Zone 12N

Universal Transverse Mercator (US Survey Feet) Map System:

NAD 1927 (NADCON CONUS) Geo Datum: Zone 12N (114 W to 108 W) Map Zone:

Mean Sea Level

Site UINTAH\_MAVERICK 921-26B HZ

Northing: 14,534,026.54 usft Site Position: Latitude: From: Lat/Long Easting: 2,056,454.91 usft Longitude:

0.00 ft Slot Radius: 13-3/16 " **Grid Convergence: Position Uncertainty:** 

40.012395 -109.514219 0.96

Well MAVERICK 921-26B HZ **Well Position** +N/-S 0.00 ft Northing: 14,534,026.54 usft Latitude: 40.012395 +E/-W 0.00 ft Easting: 2,056,454.91 usft Longitude: -109.514219 **Position Uncertainty** 0.00 ft Wellhead Elevation: Ground Level: 4,917.00 ft

MAVERICK 921-26B HZ Wellbore Magnetics **Model Name** Sample Date **Declination** Dip Angle Field Strength (°) (nT)

11.05 IGRF2010 9/28/2011 65.87 52.306 MAVERICK 921-26B HZ Design Audit Notes: Version: Phase: PLAN Tie On Depth: 0.00

**Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.00 0.00 183.63 0.00

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,350.00	0.00	0.00	2,350.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,824.14	29.48	3.66	3,759.94	370.22	23.68	2.00	2.00	0.00	3.66	
3,978.58	29.48	3.66	3,894.38	446.08	28.54	0.00	0.00	0.00	0.00	
5,192.75	91.93	183.63	4,749.00	-71.00	-4.00	10.00	5.14	14.82	179.96	
5,195.21	91.96	183.64	4,748.92	-73.46	-4.16	1.00	0.97	0.26	14.86	
9,261.69	91.96	183.64	4,610.00	-4,129.38	-261.92	0.00	0.00	0.00	0.00	MAVERICK 921-26B

Planning Report

Database: edmp Company: US RO

Project:

Site:

US ROCKIES REGION PLANNING UTAH - UTM (feet), NAD27, Zone 12N UINTAH\_MAVERICK 921-26B HZ

 Well:
 MAVERICK 921-26B HZ

 Wellbore:
 MAVERICK 921-26B HZ

 Design:
 MAVERICK 921-26B HZ

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well MAVERICK 921-26B HZ 15' RKB + 4917' GL @ 4932.00ft 15' RKB + 4917' GL @ 4932.00ft

True

Minimum Curvature

sign:	MAVERICK 92	2 1-20D FIZ							
nned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00			0.00	0.00		0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,518.00	0.00	0.00	1,518.00	0.00	0.00	0.00	0.00	0.00	0.00
GREEN RIV	ER								
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,719.00	0.00	0.00	1,719.00	0.00	0.00	0.00	0.00	0.00	0.00
BIRDS NES			, , ,						
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,202.00	0.00	0.00	2,202.00	0.00	0.00	0.00	0.00	0.00	0.00
TOP MAHO			7						
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,350.00	0.00	0.00	2,350.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2									
2,400.00	1.00	3.66	2,400.00	0.44	0.03	-0.44	2.00	2.00	0.00
2,500.00	3.00	3.66	2,499.93	3.92	0.25	-3.93	2.00	2.00	0.00
2,600.00	5.00	3.66	2,599.68	10.88	0.70	-10.90	2.00	2.00	0.00
2,652.56	6.05	3.66	2,652.00	15.93	1.02	-15.96	2.00	2.00	0.00
9 5/8"									
2,700.00	7.00	3.66	2,699.13	21.31	1.36	-21.35	2.00	2.00	0.00
2,8 <mark>00.0</mark> 0	9.00	3.66	2,798.15	35.20	2.25	-35.27	2.00	2.00	0.00
2,900.00	11.00	3.66	2,896.63	52.53	3.36	-52.63	2.00	2.00	0.00
3.000.00	13.00	3.66	2,994.44	73.27	4.69	-73.42	2.00	2.00	0.00
3,100.00	15.00	3.66	3,091.46	97.42	6.23	-73.42 -97.62	2.00	2.00	0.00
3,200.00			3,187.58	124.92				2.00	
3,200.00	17.00 19.00	3.66 3.66	3,187.58	155.76	7.99 9.96	-125.18 -156.08	2.00 2.00	2.00	0.00 0.00
3,400.00	21.00	3.66	3,376.65	189.89	12.15	-190.28	2.00	2.00	0.00
3,500.00	23.00	3.66	3,469.36	227.27	14.54	-227.74	2.00	2.00	0.00
3,600.00	25.00	3.66	3,560.71	267.86	17.14	-268.41	2.00	2.00	0.00
3,700.00	27.00	3.66	3,650.59	311.61	19.93	-312.24	2.00	2.00	0.00
3,800.00	29.00	3.66	3,738.88	358.45	22.93	-359.19	2.00	2.00	0.00
3,824.14	29.48	3.66	3,759.94	370.22	23.68	-370.98	2.00	2.00	0.00
	hold at 3824.14								
			0.00= 00	40= 40		465.54			
3,900.00	29.48	3.66	3,825.98	407.48	26.07	-408.31	0.00	0.00	0.00
3,978.58	29.48	3.66	3,894.38	446.08	28.54	-446.99	0.00	0.00	0.00

Planning Report

Database: edmp

 Company:
 US ROCKIES REGION PLANNING

 Project:
 UTAH - UTM (feet), NAD27, Zone 12N

 Site:
 UINTAH\_MAVERICK 921-26B HZ

 Well:
 MAVERICK 921-26B HZ

 Wellbore:
 MAVERICK 921-26B HZ

 Design:
 MAVERICK 921-26B HZ

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well MAVERICK 921-26B HZ 15' RKB + 4917' GL @ 4932.00ft 15' RKB + 4917' GL @ 4932.00ft

True

Minimum Curvature

esign:	MAVERICK 92	21-26B HZ							
Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Start DLS 10.	00 TFO 179.96								
4,000.00	27.34	3.66	3,913.22	456.25	29.19	-457.18	10.00	-10.00	0.01
4,100.00	17.34	3.69	4,005.60	494.13	31.62	-495.14	10.00	-10.00	0.02
4,200.00	7.34	3.77	4,103.16	515.43	33.00	-516.49	10.00	-10.00	0.08
4,300.00	2.66	183.25	4,202.95	519.50	33.29	-520.57	10.00	-4.68	179.49
4,400.00	12.66	183.55	4,301.94	506.21	32.48	-507.25	10.00	10.00	0.30
4,500.00	22.66	183.59	4,397.10	475.98	30.59	-476.96	10.00	10.00	0.04
4,600.00	32.66	183.60	4,485.56	429.70	27.68	-430.59	10.00	10.00	0.01
4,700.00	42.66	183.61	4,564.63	368.81	23.84	-369.57	10.00	10.00	0.01
4,800.00	52.66	183.62	4,631.90	295.13	19.19	-295.75	10.00	10.00	0.01
4,900.00	62.66	183.62	4,685.32	210.92	13.86	-211.37	10.00	10.00	0.00
4,933.92	66.05	183.62	4,700.00	180.40	11.93	-180.80	10.00	10.00	0.00
UTELAND BU	JTTES								
5,000.00	72.66	183.62	4,723.29	118.73	8.03	-119.00	10.00	10.00	0.00
5,100.00	82.66	183.63	4,744.63	21.36	1.86	-21.43	10.00	10.00	0.00
5,192.70	91.93	183.63	4,749.00	-70.96	-4.00	71.07	10.00	10.00	0.00
7"			1,1 10100						
5,192.75	91.93	183.63	4,749.00	-71.00	-4.00	71.11	10.00	10.00	0.00
Start DLS 1.0			,						
5,195.21	91.96	183.64	4,748.92	-73.46	-4.16	73.58	1.00	0.97	0.26
Start 4066.47	hold at 5195.21		· · · · · ·						
5,200.00	91.96	183.64	4,748.75	-78.24	-4.46	78.36	0.00	0.00	0.00
5,300.00	91.96	183.64	4,745.34	-177.98	-10.80	178.30	0.00	0.00	0.00
5,400.00	91.96	183.64	4,741.92	-277.72	-17.14	278.24	0.00	0.00	0.00
5,500.00	91.96	183.64	4,738,50	-377.46	-23.48	378.19	0.00	0.00	0.00
5,600.00	91.96	183.64	4,735.09	-477.20	-29.81	478.13	0.00	0.00	0.00
5,700.00	91.96	183.64	4,731.67	-576.94	-36.15	578.07	0.00	0.00	0.00
5,800.00	91.96	183.64	4,728.26	-676.68	-42.49	678.01	0.00	0.00	0.00
5,900.00	91.96	183.64	4,724.84	-776.42	-48.83	777.95	0.00	0.00	0.00
6,000.00	91.96	183.64	4,721.42	-876.16	-55.17	877.89	0.00	0.00	0.00
6,100.00	91.96	183.64	4,718.01	-975.90	-61.51	977.84	0.00	0.00	0.00
6,200.00	91.96	183.64	4,714.59	-1,075.64	-67.85	1,077.78	0.00	0.00	0.00
6,300.00	91.96	183.64	4,711.18	-1,175.38	-74.18	1,177.72	0.00	0.00	0.00
6,400.00	91.96	183.64	4,707.76	-1,275.12	-80.52	1,277.66	0.00	0.00	0.00
6,500.00	91.96	1 <mark>8</mark> 3.64	4,704.34	-1,374.86	-86.86	1,377.60	0.00	0.00	0.00
6,600.00	91.96	183.64	4,700.93	-1,474.60	-93.20	1,477.54	0.00	0.00	0.00
6,700.00	91.96	183.64	4,697.51	-1,574.34	-99.54	1,577.49	0.00	0.00	0.00
6,800.00	91.96	183.64	4,694.09	-1,674.08	-105.88	1,677.43	0.00	0.00	0.00
6,900.00	91.96	183.64	4,690.68	-1,773.82	-112.22	1,777.37	0.00	0.00	0.00
7,000.00	91.96	183.64	4,687.26	-1,873.56	-118.56	1,877.31	0.00	0.00	0.00
7,100.00	91.96	183.64	4,683.85	-1,973.30	-124.89	1,977.25	0.00	0.00	0.00
7,200.00	91.96	183.64	4,680.43	-2,073.04	-131.23	2,077.19	0.00	0.00	0.00
7,300.00	91.96	183.64	4,677.01	-2,172.79	-137.57	2,177.14	0.00	0.00	0.00
7,400.00	91.96	183.64	4,673.60	-2,272.53	-143.91	2,277.08	0.00	0.00	0.00
7,500.00	91.96	183.64	4,670.18	-2,372.27	-150.25	2,377.02	0.00	0.00	0.00
7,600.00	91.96	183.64	4,666.77	-2,472.01	-156.59	2,476.96	0.00	0.00	0.00
7,700.00	91.96	183.64	4,663.35	-2,571.75 2,671.40	-162.93	2,576.90	0.00	0.00	0.00
7,800.00	91.96	183.64	4,659.93	-2,671.49	-169.26	2,676.84	0.00	0.00	0.00
7,900.00	91.96	183.64	4,656.52	-2,771.23	-175.60	2,776.79	0.00	0.00	0.00
8,000.00	91.96	183.64	4,653.10	-2,870.97	-181.94	2,876.73	0.00	0.00	0.00
8,100.00	91.96	183.64	4,649.68	-2,970.71	-188.28	2,976.67	0.00	0.00	0.00
8,200.00 8,300.00	91.96 91.96	183.64 183.64	4,646.27 4,642.85	-3,070.45 -3,170.19	-194.62 -200.96	3,076.61 3,176.55	0.00 0.00	0.00 0.00	0.00 0.00
0,300.00	31.30	100.04	4,042.00	-5, 170.18	-200.90	3,170.00	0.00	0.00	0.00

Planning Report

Database: edmp

 Company:
 US ROCKIES REGION PLANNING

 Project:
 UTAH - UTM (feet), NAD27, Zone 12N

 Site:
 UINTAH\_MAVERICK 921-26B HZ

 Well:
 MAVERICK 921-26B HZ

 Wellbore:
 MAVERICK 921-26B HZ

 Design:
 MAVERICK 921-26B HZ

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well MAVERICK 921-26B HZ 15' RKB + 4917' GL @ 4932.00ft 15' RKB + 4917' GL @ 4932.00ft

True

Minimum Curvature

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,400.00	91.96	183.64	4,639.44	-3,269.93	-207.30	3,276.49	0.00	0.00	0.00
8,500.00	91.96	183.64	4,636.02	-3,369.67	-213.63	3,376.44	0.00	0.00	0.00
8,600.00	91.96	183.64	4,632.60	-3,469.41	-219.97	3,476.38	0.00	0.00	0.00
8,700.00	91.96	183.64	4,629.19	-3,569.15	-226.31	3,576.32	0.00	0.00	0.00
8,800.00	91.96	183.64	4,625.77	-3,668.89	-232.65	3,676.26	0.00	0.00	0.00
8,900.00	91.96	183.64	4,622.36	-3,768.63	-238.99	3,776.20	0.00	0.00	0.00
9,000.00	91.96	183.64	4,618.94	-3,868.37	-245.33	3,876.14	0.00	0.00	0.00
9,100.00	91.96	183.64	4,615.52	-3,968.11	-251.67	3,976.09	0.00	0.00	0.00
9,200.00	91.96	183.64	4,612.11	-4,067.85	-258.01	4,076.03	0.00	0.00	0.00
9,261.69	91.96	183.64	4,610.00	-4,129.38	-261.92	4,137.68	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
MAVERICK 921-26B HZ - plan hits target cent - Point	0.00 er	0.00	4,610.00	-4,129.38	-261.92	14,529,893.37	2,056,261.89	40.001057	-109.515154

Casing Points				
	Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Hole Diameter Diameter (") (")
	2,652.56	2,652.00 9 5/8"		9-5/8 12-1/4
	5,192.70	4,749.00 7"		7 7-1/2

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,518.00	1,518.00 GREEN	RIVER		0.00	
1,719.00	1,719.00 BIRDS I	NEST		0.00	
2,202.00	2,202.00 TOP MA	HOGANY		0.00	
4,933.92	4,700.00 UTELAN	ND BUTTES		0.00	

Plan Annotations										
	Measured	Vertical	Local Coordinates							
	Depth	Depth	+N/-S	+E/-W						
	(ft)	(ft)	(ft)	(ft)	Comment					
	2,350.00	2,350.00	0.00	0.00	Start Build 2.00					
	3,824.14	3,759.94	370.22	23.68	Start 154.44 hold at 3824.14 MD					
	3,978.58	3,894.38	446.08	28.54	Start DLS 10.00 TFO 179.96					
	5,192.75	4,749.00	-71.00	-4.00	Start DLS 1.00 TFO 14.86					
	5,195.21	4,748.92	-73.46	-4.16	Start 4066.47 hold at 5195.21 MD					
	9,261.69	4,610.00	-4,129.38	-261.92	TD at 9261.69					

Surface Use Plan of Operations

1 of 7

#### MAVERICK 921-26B-HZ

 Surface:
 681 FNL / 1512 FEL
 NWNE

 BHL:
 460 FSL / 1780 FEL
 SWSE

Mineral Lease: UT ST UO 01194 ST/UT ST ML 22934

Uintah County, Utah
Operator: Kerr-McGee Oil & Gas Onshore LP

This SUPO contains surface operating procedures for Kerr-McGee Oil & Gas Onshore LP (KMG), a wholly owned subsidiary of Anadarko Petroleum Corporation (APC) pertaining to actions that involve the State of Utah School and Institutional Trust Lands Administration (SITLA) in the development of minerals leased to APC/KMG (including but not limited to, APDs/SULAs/ROEs/ROWs and/or easements.)

See associated Utah Division of Oil, Gas, and Mining (UDOGM) Form 3(s), plats, maps, and other attachments for site-specific information on projects represented herein.

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, these wells will be directionally drilled. Refer to Topo Map A for directions to the location and Topo Maps A and B for location of access roads within a 2-mile radius.

#### A. Existing Roads:

Existing roads consist of county and improved/unimproved lease roads. KMG will maintain existing roads in a condition that is the same as or better than before operations began and in a safe and usable condition. Maintenance of existing roads will continue until final abandonment and reclamation of well pads and/or other facilities. The road maintenance may include, but is not limited to, blading, ditching, culvert installation/cleanout, surfacine, and dust control.

Typically, roads, gathering lines and electrical distribution lines will occupy common disturbance corridors and roadways will be used as working space. All disturbances located in the same corridor will overlap each other to the maximum extent possible; in no case will the maximum disturbance width of the access road and utility corridors exceed 50', unless otherwise approved.

#### B. Planned Access Roads:

One New Access road is proposed. (see Topo Map B). The New Access road length will be 240' +/-. Applicable Uintah County encroachment and/or pipeline crossing permits will be obtained prior to construction/development. No other pipelines will be crossed at this location.

The exisiting Access road to the NBU 190 location will be used as well. The New Access Road will be reclaimed upon completion of the new well.

If there are roads that are new or to be reconstructed, they will be located, designed, and maintained to meet the standards of SITLA and other commonly accepted Best Management Practices (BMPs). If a new road/corridor were to cross a water of the United States, KMG will adhere to the requirements of applicable Nationwide or Individual Permits of the Department of Army Corps of Engineers.

During the onsite, turnouts, major out and fills, culverts, bridges, gates, cattle guards, low water crossings, or modifications needed to existing infrastructure/facilities were determined, as applicable, are typically shown on attached Exhibits and Topo maps.

#### C. Location of Existing and Proposed Facilities:

This pad will expand the existing pad for the NBU 190. The NBU 190 well location is a vertical producing well according to Utah Division of Oil, Gas and Mining (UDOGM) records as of September 29, 2011

Surface Use Plan of Operations

2 of 7

Production facilities (see Well Pad Design Summary and Facilities Diagram):

Production facilities will be installed on the disturbed portion of the well pad and may include bermed components (typically excluding dehy's and/or separators) that contain fluids (i.e. production tanks, produced liquids tanks). The berms will be constructed of compacted subsoil or corrugated metal, impervious, designed to hold 110% of the capacity of the largest tank, and be independent of the back cut. All permanent (on-site six months or longer) above ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earth-tone color chosen at the onsite in coordination with STILA.

#### **Gathering Facilities:**

The following pipeline transmission facilities will apply if the well is productive (see Topo D):

The total gas gathering (steel line pipe with fusion bond epoxy coating) pipeline distances from the meter to the tie in point is  $\pm 375^{\circ}$  and the individual segments are broken up as follows:

 $\pm 350^{\circ}$  (0.07 miles) –New 8" buried gas pipeline from the meter to the edge of the pad. Please refer to Topo D2 - Pad and Pipeline Detail.

±25' (0.004 miles) –New 8" buried gas pipeline from the edge of pad to the proposed 8" gas gathering re-route tie-in. Please refer to Topo D2 - Pad and Pipeline Detail.

An existing 8" Surface Gas Pipeline will be re-routed. The total distance of the re-route will be ±670 Please refer to Topo D2-Pad and Pipeline Detail.

Where the pipeline is adjacent to the road or well pad, the road and/or well pad will be utilized for construction activities and staging. KMG requests a permanent 30' right-of-way adjacent to the road for life-of-project for maintenance, repairs, and/or upgrades, no additional right-of-way will be needed beyond the 30'. Where the pipeline is not adjacent to the road or well pad, KMG requests a temporary 45' construction right-of-way 30' permanent right-of-way.

The proposed trench width for the pipeline would range from 18-48 inches and will be excavated to a depth of 48 to 60 inches of normal soil cover or 24 inches of cover in consolidated rock. During construction blasting may occur along the proposed right-of-way where trenching equipment cannot cut into the bedrock. Large debris and rocks removed from the earth during trenching and blasting that could not be returned to the trench would be distributed evenly and naturally in the project area. The proposed pipelines will be pressure tested pneumatically (depending on size) or with fluids (either fresh or produced). If fluids are used, there will be no discharge to the surface.

Pipeline signs will be installed along the right-of-way to indicate the pipeline proximity and ownership, as well as to provide emergency contact phone numbers. Above ground valves, T's, and/or cathodic protection will be installed at various locations for connection, corrosion prevention and/or for safety purposes.

#### D. Location and Type of Water Supply:

Water for drilling purposes will be obtained from one of the following sources:

- Dalbo Inc.'s underground well located in Ouray, Utah, Sec. 32 T4S R3E, Water User Claim number 43-8496, application number 53617.
- Price Water Pumping Inc. Green River and White River, various sources, Water Right Number 49-1659, application number: a35745.

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

Surface Use Plan of Operations

3 of 7

#### E. Source of Construction Materials:

Construction operations will typically be completed with native materials found on location. If needed, construction materials that must be imported to the site (mineral material aggregate, soils or materials suitable for fill/surfacing) will be obtained from a nearby permitted source and described in subsequent Sundry requests. No construction materials will be removed from State lands without prior approval from SITLA.

#### F. Methods for Handling Waste Materials

Should the well be productive, produced water will be contained in a water tank and will be transported by pipeline and/or truck to an approved disposal sites facilities and/or Salt Water Disposal (SWD) injection well. Currently, those facilities are:

RNI in Sec. 5 T9S R22E Ace Oilfield in Sec. 2 T6S R20E MC&MC in Sec. 12 T6S R19E Pipeline Facility in Sec. 36 T9S R20E

Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E

Bonanza Evaporation Pond in Sec. 2 T10S R23E

Ouray #1 SWD in Sec. 1 T9S R21E NBU 159 SWD in Sec. 35 T9S R21E CIGE 112D SWD in Sec. 19 T9S R21E CIGE 114 SWD in Sec. 34 T9S R21E NBU 921-34K SWD in Sec. 34 T9S R21E NBU 921-33F SWD in Sec. 33 T9S R21E NBU 921-34L SWD in Sec. 34 T9S R21E

Kerr-McGee will use either a closed loop drilling system that will require one pit and one cuttings storage area to be constructed on the drilling pad or a traditional drilling operation with one pit used for drilling and completion operations. The cuttings storage area will be used to contain only the de-watered drill cuttings and will be lined and bermed to prevent any liquid runoff. The drill cuttings will be buried in the completion pit once completion operations are completed according to traditional pit closure standards. The pit will be constructed to allow for completion operations. The completion operations pit will be lined with a synthetic material 20 mil or thicker and will be used for the completing of the wells on the pad or used as part of our Aandarko Completions Transportation System (ACTS). Using the closed loop drilling system will allow Kerr-McGee to decrease the amount of disturbance/footprint on location compared to a single large drilling/completions pit.

If Kerr-McGee does not use a closed loop drilling system, it will construct a traditional drilling/completions pit to contain drill cuttings and for use in completion operations. The pit will be lined with a synthetic material 20 mil or thicker. The drill cuttings will be buried in the pit using traditional pit closure standards.

Unless otherwise approved, no oil or other oil based drill additives, chromium/metals-based, or saline muds will be used during drilling. Only fresh water, biodegradable polymer soap, bentonite clay, and /or non-toxic additives will be used in the system.

Pits will be constructed to minimize the accumulation of surface runoff. Should fluid hydrocarbons be encountered during drilling, completions, or well testing, product will either be contained in test tanks on the well site or evacuated by vacuum

trucks and transported to an approved disposal/sales facility. Should petroleum hydrocarbons unexpectedly be release into the pit, they will be removed as soon as practical but in no case will they remain longer than 72 hours unless an alternative is approved by SITLA. Should timely removal prove infeasible, the pit will be netted with mesh no larger than 1 inch until such time as the hydrocarbons can be removed. Hydrocarbon removal will also take place prior to the closure of the pit, unless authorization is provided for disposal via alternative pit closure methods. (e.g. solidification)

Surface Use Plan of Operations

4 of 7

Any additional pits necessary for subsequent operations, such as temporary flare pits, or workover pits, will contained within the originally approved well pad and disturbance boundaries. Such temporary pits will be backfilled and reclaimed within 180 days of completion of the work.

For the protection of livestock and wildlife, all open pits and cellars will be fenced/covered to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

Pits containing drilling cuttings, mud, and/or completions fluids will be allowed to dry. Any free fluids remaining after after six (6) months from reaching total depth, date of completion, and/or determination of inactivity will be removed (as weather conditions allow) to an approved site and the pit reclaimed. Additional drying methods may include fly-ash solidification or sprinkler evaporation. Installation and operation of any sprinklers, pumps, and equipment will ensure that water spray or mist does not drift. Reserve pit liners will be cut off or folded as near to the mud surface as possible and as safety considerations allow and buried on location.

No garbage or non-exempt substances as defined by Resource Conservation and Recovery Act (RCRA) subtitle C will be placed in the reserve pit. All refuse generated during construction, drilling, completion, and well testing activities will be contained in an enclosed receptacle, removed from the drill locations promptly, and transported to an approved disposal facility.

Portable, self-contained chemical toilets and/or sewage processing facilities will be provided for human waste disposal. Upon completion of operations, or as required, the toilet holding tanks will be pumped and the contents disposed of in an approved sewage disposal facility. All applicable regulations pertaining to disposal of human and solid waste will be observed.

Any undesirable event, including accidental release of fluids, or release in excess of reportable quantities, will be managed according to the notification requirements of UDOGMs "Reporting Oil and Gas Undesirable Events" rule. Where State wells are participatory to a Federal agreement, according to NTL-3A, the appropriate Federal agencies will be notified.

#### Materials Management

Hazardous materials above reportable quantities will not be produced by drilling or completing proposed wells or constructing the pipelines/facilities. The term "hazardous materials" as used here means: (1) any substance, pollutant, or containment listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended 42 U.S.C. 9601 et seq., and the regulations issued under CERCLA; and (2) any hazardous waste as defined in RCRA of 1976, as amended. In addition, no extremely hazardous substance, as defined in 40 CFR 355, in threshold planning quantities, would be used, produced, stored, transported, or disposed of while producing any well.

Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act (SARA) in quantities of 10,000 pounds or more may be produced and/or stored at production facilities and may be kept in limited quantities on drilling sites and well locations for short periods of time during drilling or completion activities.

#### G. Ancillary Facilities:

None are anticipated

#### H. Well Site Layout (see Well Pad Design Summary:

The location, orientation and aerial extent of each drill pad; reserve/completion/flare pit; access road ingress/ egress points, drilling rig, dikes/diches, existing wells/infrastructure; proposed cuts and fills; and topsoil and spoil material stockpile locations are depicted on the exhibits for each project, where applicable. Site-specific conditions may require slight deviation in actual equipment and facility layout; however, the area of disturbance, as described in the survey, will not be exceeded.

Coordinates are provided in the National Spatial Reference System, North American Datum, 1927 (NAD27) or latest edition. Distances are depicted on each plat to the nearest two adjacent section lines.

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#### I. Plans for Reclamation of the Surface:

Surface reclamation will be undertaken in two phases: interim and final. Interim reclamation is conducted following well completion and extends through the period of production. This reclamation is for the area of the well pad that is not required for production activities. Final reclamation is conducted following well plugging/conversion and/or facility abandonment processes.

Reclamation activities in both phases may include but is not limited to the re-contouring or re-configuration of topographic surfaces, restoration of drainage systems, segregation of spoils materials, minimizing surface disturbance, re-evaluating backfill requirements, pit closure, topsoil redistribution, soil treatments, seeding and weed control

#### Interim Reclamation

Interim reclamation includes pit closure, re-contouring (where possible), soil bed preparation, topsoil placement, seeding, and/or weed control.

Interim re-contouring involves bringing all construction material from cuts and fills back onto the well pad and site and reestablishing the natural contours where desirable and practical. Fill and stockpiled spoils no longer necessary to the operation will be spread on the cut slopes and covered with stockpiled topsoil. All stockpiled top soils will be used for interim reclamation where practical to maintain soil viability. Where possible, the land surface will be left "rough" after re-contouring to ensure that the maximum surface area will be available to support the reestablishment of vegetative cover.

A reserve pit, upon being allowed to dry, will be backfilled and compacted with cover materials that are void of any topsoil, vegetation, large stones, rocks or foreign objects. Soils that are moisture laden, saturated, or partially/

completely frozen will not be used for backfill or cover. The pit area will be mounded to allow for settling and to promote positive surface drainage away from the pit.

#### Final Reclamation

Final reclamation will be performed for newly drilled unproductive wells and/or at the end of the life of a productive well. As soon as practical after the conclusion of drilling and testing operations, unproductive drill holes will be plugged and abandoned (P&A). Site and road reclamation will commence following plugging. In no case will reclamation at non-producing locations be initiated later than six (6) months from the date a well is plugged. A joint inspection of the disturbed area to be reclaimed may be requested by KMG. The primary purpose of this inspection will be to review the existing conditions, or agree upon a revised final reclamation and abandonment plan. A Notice of Intent to Abandon will be filed for final recommendations regarding surface

After plugging, all wellhead equipment that is no longer needed will be removed, and the well site will be reclaimed. Final contouring will blend with and follow as closely as practical the natural terrain and contours of the original site and surrounding areas. After re-contouring, final grading will be conducted over the entire surface of the well site and access road. Where practical, the area will be ripped to a depth of 18 to 24 inches on 18 to 24-inch centers and surface materials will be pirted with small depressions to form longitudinal depressions 12 to 18 inches deep perpendicular to the natural flow of water.

All unnecessary surface equipment and structures (e.g. cattle guards) and water control structures (e.g. culverts, drainage pipes) not needed to facilitate successful reclamation will be removed during final reclamation. Roads that will be reclaimed will be ripped to a depth of 18 inches where practical, re-contoured to approximate the original contour of the ground and seeded.

Upon successfully completing reclamation of a P&A location, a Final Abandonment Notice will be submitted to UDOGM.

#### Seeding and Measures Common to Interim and Final Reclamation

Reclaimed areas may be fenced to exclude grazing and encourage re-vegetation.

On slopes where severe erosion can become a problem and the use of machinery is not practical, seed will be hand broadcast and raked with twice the specified amount of seed. The slope will be stabilized using materials specifically designed to prevent erosion on steep slopes and hold seed in place so vegetation can become permanently established. These materials will include, but are not limited to, erosion control blankets and bonded fiber matrix at a rate to achieve a minimum of 80 percent soil coverage.

Seeding will occur year-round as conditions allow. Seed mixes appropriate to the native plant community as determined and specified for each project location based on the site specific soils will be used for re-vegetation. The site specific seed mix will be provided by SITLA.

#### J. Surface/Mineral Ownership:

SITLA 675 East 500 South, Suite 500 Salt Lake City, UT 84102

#### L. Other Information:

None

MAVERICK 921-26B-HZ
Surface Use Plan of Operations

#### M. Lessee's or Operators' Representative & Certification:

Andy Lytle Regulatory Analyst I Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6100 Tommy Thompson General Manager, Drilling Kerr-McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779 (720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage for State lease activities is provided by State Surety Bond 22013542, and for applicable Federal lease activities and pursuant to 43 CFR 3104, by Bureau of Land Management Nationwide Bond WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have fu!l knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct, and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Andy Lytle

October 3, 2011

Date

#### Kerr-McGee Oil & Gas Onshore LP



1099 18th Street, Suite 1800 Denver, CO 80202-1918 P.O. Box 173779 Denver, CO 80217-3779 720-929-6000

October 3, 2011

Mr. Brad Hill Division of Oil, Gas and Mining P.O. Box 145801 Salt Lake City, UT 84114-5801

Re: Maverick 921-26B-HZ

Township 9 South, Range 21 East, SLM

Section 26: NW1/4NE1/4

Surface Location: 681' FNL, 1,512' FEL Bottom Hole Location: 460' FSL, 1,780' FEL

Uintah County, Utah

Dear Mr. Hill:

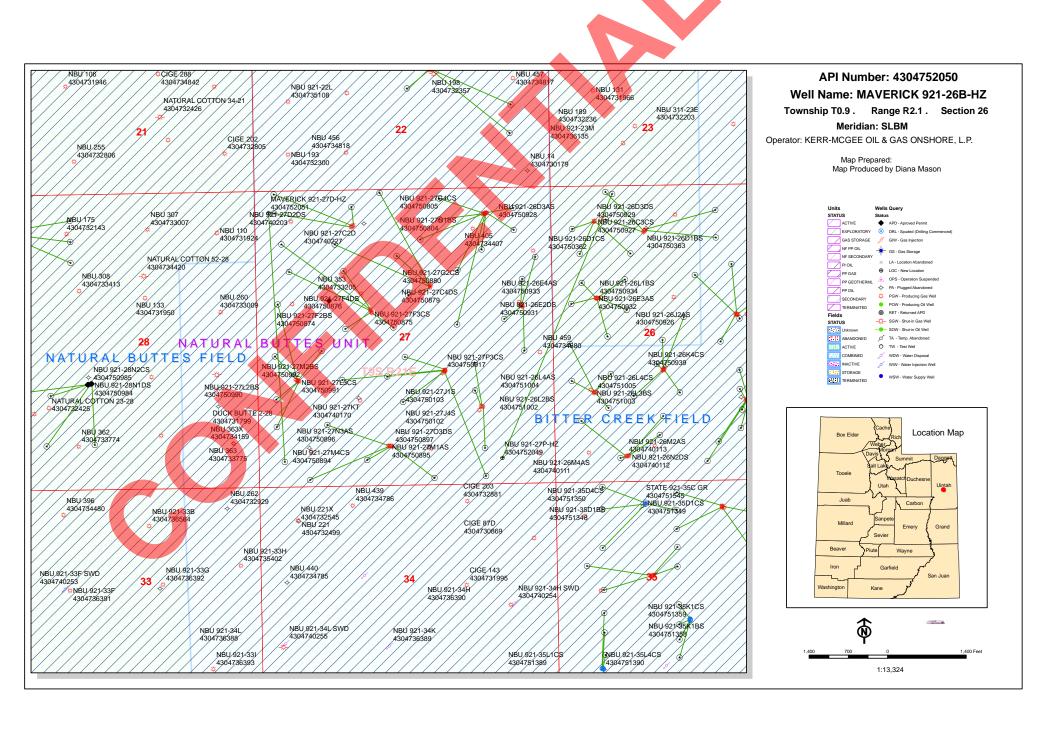
Pursuant to the filing of Kerr-McGee Oil & Gas Onshore LP's (KMOG) Application for Permit to Drill regarding the above referenced well, submitted herewith is a request for administrative approval to an exception to Cause No. 197-1 establishing 160 acre horizontal drilling units for the Green River formation and further, that the location for each permitted well shall be not less than 1,000 feet from the exterior boundary of the drilling unit. KMOG also requests the formation of a temporary 640 acre spacing unit consisting of all of Section 26-T9S-R21E. KMOG submits the following in support of its request:

- 1. The surface location for the Maverick 921-26B-Hz will be in the NWNE and the lateral will terminate in the SWSE.
- 2. KMOG owns all of the leasehold rights in the proposed wellbore and in all of the adjacent and offsetting 160 spacing units.
- 3. There are no producing Green River wells in the E½ of Section 26-T9S-R21E and no producing wells within 1,320' of the proposed horizontal well bore.
- 4. KMOG and SITLA have agreed to voluntarily pool all of Section 26-T9S-R21E which covers portions of ST UT UO 01194 ST (W½, NE¼) and ST UT ML-22934 (SE¼) for the drilling of this well.
- 5. KMOG will be able to utilize existing roads and pipelines for the drilling and producing of this well.

Sincerely,

KERR-MCGEE OIL & GAS ONSHORE LP

Thomas A. Marranzino Project Land Advisor



From: Jim Davis

To: Bonner, Ed; Garrison, LaVonne; Hackford, David; Hill, Brad; Mason, D...

CC: Julie Jacobsen; Lytle, Andy

**Date:** 10/17/2011 4:33 PM **Subject:** APD approvals

The following APD have been approved by SITLA including arch clearance. Paleo clearance is granted with the following stipulations as recommended in the paleo reports. The NBU 921-27P-HZ will require full paleo monitoring, the MAVERICK 921-26B-HZ and MAVERICK 921-27D-HZ will require spot monitoring.

4304752049 NBU 921-27P-HZ

4304752050 MAVERICK 921-26B-HZ 4304752051 MAVERICK 921-27D-HZ

Thanks.

-Jim

Jim Davis Utah Trust Lands Administration jimdavis1@utah.gov Phone: (801) 538-5156

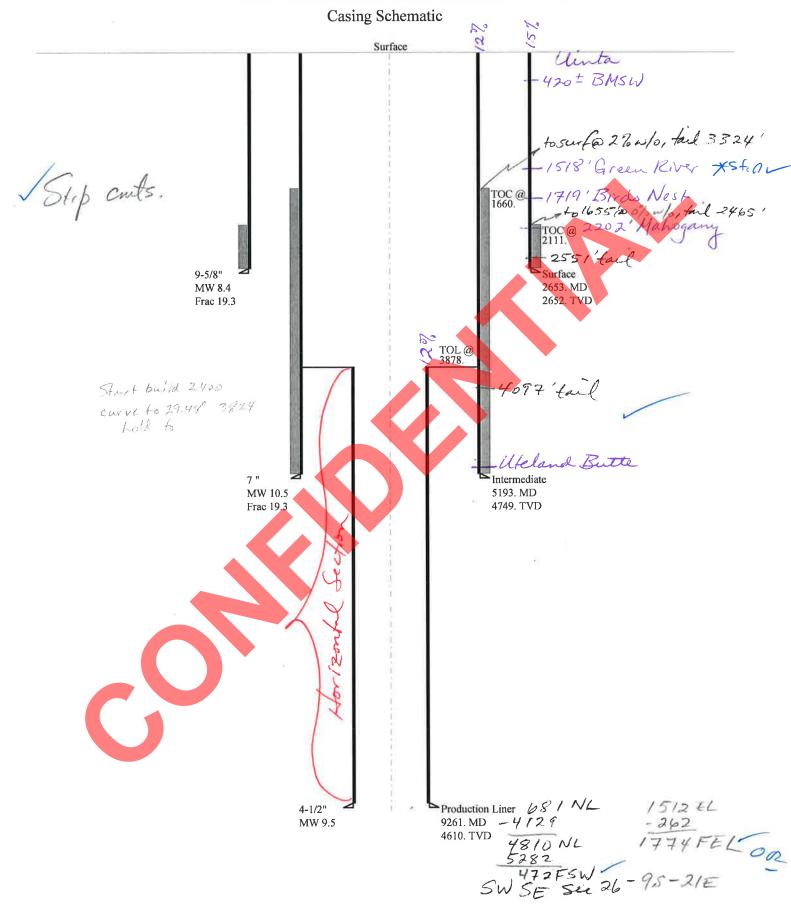
#### BOPE REVIEW KERR-MCGEE OIL & GAS ONSHORE, L.P. MAVERICK 921-26B-HZ 43047520500000

I								
Well Name		KERR-MCGE	E OIL	. & GAS Of	IS	HORE, L.P. MA	۱V	VERICK 921-2
String		SURF	11			<u>L1</u>	<u></u>	
Casing Size(")		9.625	7.0	000		4.500	[	
Setting Depth (TVD)		2653	51	93	Ī	4610	Γ	
Previous Shoe Setting Dept	th (TVD)	40	26	53	Ī	5193	Ī	
Max Mud Weight (ppg)		8.4	10	.5	Ī	9.2	Ī	
BOPE Proposed (psi)		500	50	00	ľ	5000	Ī	
Casing Internal Yield (psi)		3520	99	_	ť	10690	Ī	<del></del>
Operators Max Anticipate	d Pressure (psi)	2028			H	8.5	<u>                                     </u>	
Calculations	SUR	F String			_	9.62	5	"
Max BHP (psi)	Ser	.052*Setti	ing D	Depth*MV	V=		7	
, , ,				1	_	11100	╣	BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max	x BHP-(0.12*	*Setti	ing Depth	1)=	841	╗	NO air dríl
MASP (Gas/Mud) (psi)	Max	x BHP-(0.22*	*Setti	ing Denth		-	╬	NO Reasonable depth in area
(		(**==	~~~			373	╣	*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting December 1)	epth - Previou	us Sł	noe Depth	1)=	575	╬	NO INC.
Required Casing/BOPE Te				<b>I</b>	_	10.0	╬	psi
*Max Pressure Allowed @					_	2464	4	psi *Assumes 1psi/ft frac gradient
Wiax Fressure Anoweu (a)	Trevious Casing Silve-				_	0	4	Assumes Tpsi/It frac gradient
Calculations	I1	String				7.00	0	n
Max BHP (psi)		.052*Setti	ing D	epth*M	V=	2835	1	
								BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max	x BHP-(0.12*	*Setti	ing Depth	1)=	2212	7	YES
MASP (Gas/Mud) (psi)	Max	x BHP-(0.22*	*Setti	ing Depth	ı)=	1693	i	YES   OK
					7	17	╣	*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting D	epth - Previou	us Sł	noe Depth	1)=	2276	7	YES OK
Required Casing/BOPE Te	est Pressure=					5000	i	psi
*Max Pressure Allowed @	Previous Casing Shoe=				_	2653	i	psi *Assumes 1psi/ft frac gradient
						12000		
Calculations	L1	String				4.50	0	"
Max BHP (psi)		.052*Setti	ing D	epth*MV	V=	2205		
							]	BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max	k BHP-(0.12*	*Setti	ing Depth	ı)=	1652		YES
MASP (Gas/Mud) (psi)	Max	x BHP-(0.22*	*Setti	ing Depth	ı)=	1191		YES OK
								*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting D	epth - Previou	us Sł	noe Depth	1)=	2333		YES OK
Required Casing/BOPE To	est Pressure=					4610		psi
*Max Pressure Allowed @	Previous Casing Shoe=					5193	j	psi *Assumes 1psi/ft frac gradient
Calculations	S	tring			_		7	"
Max BHP (psi)		.052*Setti	ing D	Depth*MV	V=		i	
					_		╣	BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max	x BHP-(0.12*	*Setti	ing Depth	1)=	-	i	NO
MASP (Gas/Mud) (psi)	Max	x BHP-(0.22*	*Setti	ing Depth	ı)=	=	i	NO I
, , , , ,		`		- 1	_	1	4	*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting De	epth - Previou	us Sł	noe Depth	1)=	-	╗	NO
Required Casing/BOPE Te		- '		1.	_	1	╬	psi
						<u> [l</u>	4	r**

\*Max Pressure Allowed @ Previous Casing Shoe= psi \*Assumes 1psi/ft frac gradient



#### 43047520500000 MAVERICK 921-26B-HZ



Well name:

43047520500000 MAVERICK 921-26B-HZ

Operator:

KERR-MCGEE OIL & GAS ONSHORE, L.P.

COUNTY

Project ID:

String type:

Surface

43-047-52050

Location:

**UINTAH** 

Design	parameters:
Callana	_

**Collapse** 

8.400 ppg Mud weight: Design is based on evacuated pipe.

Minimum design factors: Collapse:

1.125 Design factor

**Environment:** 

H2S considered? No 74 °F Surface temperature: 111 °F Bottom hole temperature:

1.40 °F/100ft Temperature gradient: Minimum section length:

100 ft

**Burst:** 

Design factor

1.00

1.80 (J)

1.70 (J)

1.60 (J)

1.50 (J)

1.50 (B)

Cement top:

2,111 ft

**Burst** 

Max anticipated surface

No backup mud specified.

pressure: Internal gradient: Calculated BHP

2,209 psi 0.120 psi/ft

2,528 psi

Tension: 8 Round STC:

8 Round LTC: Buttress: Premium:

Body yield:

Tension is based on air weight. Neutral point: 2,323 ft Directional well information:

Kick-off point 0 ft Departure at shoe: 16 ft Maximum dogleg: 2 °/100ft

6.06° Inclination at shoe:

Re subsequent strings:

Next setting depth: 5,193 ft Next mud weight: 10.500 ppg Next setting BHP: 2,833 psi Fracture mud wt: 19.250 ppg Fracture depth: 2,653 ft Injection pressure: 2,653 psi

True Vert Measured Drift Est. Nominal End Segment Run Cost **Grade** Depth Depth Diameter Length Size Weight Finish Seq (lbs/ft) (ft) (ft) (in) (\$) (ft) (in) 21695 2653 9.625 36.00 J-55 LT&C 2652 2653 8.796 1 Collapse Collapse Collapse Burst Burst **Burst Tension Tension** Tension Run Design Design Load Strenath Design Load Strength Load Strength Seq (kips) **Factor** (psi) **Factor** (kips) (psi) (psi) **Factor** (psi) 95.5 453 4.74 J 2528 3520 1.39 1 1157 1974 1.706

Prepared

Helen Sadik-Macdonald Div of Oil, Gas & Mining

Phone: 801 538-5357 FAX: 801-359-3940

Date: November 14,2011 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 2652 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Well name:

43047520500000 MAVERICK 921-26B-HZ

Operator:

KERR-MCGEE OIL & GAS ONSHORE, L.P.

String type:

Intermediate

Project ID:

Design parameters:

43-047-52050

Location:

COUNTY UINTAH

> **Environment:** Minimum design factors:

> > 1.80 (J)

1.70 (J)

1.60 (J)

1.50 (J)

1.50 (B)

Collapse

10.500 ppg Mud weight: Design is based on evacuated pipe.

Collapse:

Design factor 1.125 H2S considered?

No 74 °F Surface temperature: 140 °F Bottom hole temperature.

Temperature gradient: 1.40 °F/100ft Minimum section length: 100 ft

**Burst:** 

Design factor 1.00 Cement top

2.012 ft

**Burst** 

Max anticipated surface

No backup mud specified.

pressure: Internal gradient: Calculated BHP

2,533 psi 0.220 psi/ft

3,578 psi

**Tension:** 

8 Round STC: 8 Round LTC: Buttress:

Premium:

Body yield:

Tension is based on air weight. Neutral point: 4,100 ft Directional well information:

Kick-off point 0 ftDeparture at shoe: 72 ft 10 °/100ft Maximum dogleg:

Inclination at shoe: 91.96°

Re subsequent strings:

Next setting depth: 9,261 ft Next mud weight: 9.500 ppg Next setting BHP: 4.570 psi Fracture mud wt: 19.250 ppg Fracture depth: 5,193 ft Injection pressure: 5,193 psi

Run Seq	Segment Length	Size	Nominal Weight	Grade	End Finish	True Vert Depth	Measured Depth	Drift Diameter	Est. Cost
	(ft)	(in)	(lbs/ft)			(ft)	(ft)	(in)	(\$)
1	5193	7	26.00	HCP-110	LT&C	4749	5193	6.151	53981
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load	Strength	Design	Load	Strength	Design	Load	Strength	Design
_	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(kips)	(kips)	Factor
1	2590	7788	3.007	3578	9950	2.78	123.5	693	5.61 J

Prepared

by:

Helen Sadik-Macdonald

Div of Oil Gas & Mining

Phone: 801 538-5357

FAX: 801-359-3940

Date: November 14,2011

Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 4749 ft, a mud weight of 10.5 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Well name:

43047520500000 MAVERICK 921-26B-HZ

Operator:

KERR-MCGEE OIL & GAS ONSHORE, L.P.

String type:

Production Liner

Project ID:

43-047-52050

Location:

UINTAH

COUNTY

Minimum design factors: **Environment:** 

**Collapse** 

Mud weight: 9.500 ppg Design is based on evacuated pipe.

Collapse:

Design factor 1.125 H2S considered?

No Surface temperature: 74 °F

139 °F Bottom hole temperature: Temperature gradient: 1.40 °F/100ft

Minimum section length:

**Burst:** 

Design factor

1.00

1.80 (J)

1,000 ft

**Burst** 

Max anticipated surface

pressure: Internal gradient: Calculated BHP

Design parameters:

1,261 psi 0.220 psi/ft

2,275 psi

No backup mud specified.

Tension:

8 Round STC: 8 Round LTC:

Premium:

Body yield:

1.80 (J) Buttress: 1.60 (J)

1.50 (J) 1.60 (B)

Tension is based on air weight. Neutral point: 4,787 ft

Liner top: 3,878 ft

Directional well information: Kick-off point 3824 ft

Departure at shoe: 4137 ft Maximum dogleg: 10 °/100ft 91.96° Inclination at shoe:

Estimated cost: 56,044 (\$)

Run	Segment	Size	Nominal Weight	Grade	End Finish	True Vert Depth	Measured Depth	Drift Diameter	Est. Cost
Seq	Length (ft)	(in)	(lbs/ft)	Grade	Fillish	(ft)	(ft)	(in)	(\$)
2	1400	4.5	11.60	HCP-110	DQX	4745	5300	3.875	36960
1	3961	4.5	11.60	HCP-110	LT&C	4610	9261	3.875	19084
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load	Strength	Design	Load	Strength	Design	Load	Strength	Design
	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(kips)	(kips)	Factor
2	2342	8650	3.694	2305	10690	4.64	9.1	367.2	40.39 B
1	2275	8650	3.802	2305	10690	4.64	-1.6	279	99.99 J

Prepared

Helen Sadik-Macdonald

Div of Oil, Gas & Mining by:

Phone: 801 538-5357 FAX: 801-359-3940

Date: November 14,2011 Salt Lake City, Utah

Remarks:

For this liner string, the top is rounded to the nearest 100 ft. Collapse is based on a vertical depth of 4610 ft, a mud weight of 9.5 ppg. The Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

### **ON-SITE PREDRILL EVALUATION**

#### Utah Division of Oil, Gas and Mining

**Operator** KERR-MCGEE OIL & GAS ONSHORE, L.P.

Well Name MAVERICK 921-26B-HZ

API Number 43047520500000 APD No 4737 Field/Unit NATURAL BUTTES

Location: 1/4,1/4 NWNE Sec 26 Tw 9.0S Rng 21.0E 681 FNL 1512 FEL

GPS Coord (UTM) 626812 4429980 Surface Owner

#### **Participants**

Andy Lytle, Jaime Scharnowski, Doyle Holmes, Charles Chase, Grizz Olean, Sheila Wopsock; Anadarko. John Slaw, Mitch Batty; Timberline. Ben Williams; DWR. Jim Davis; SITLA. David Hackford; DOGM.

#### Regional/Local Setting & Topography

The general area is the Natural Buttes Unit in a major un-named drainage west of the lower portion of the Sand Wash drainage of Uintah, County, approximately 24 air miles and 42 road miles south of Vernal, Utah. Access is by State of Utah Highways, Uintah County and existing oilfield development roads. Topography of the area is characterized by open flats bordered or dissected by numerous sub-drainages, which often become steep with ridges and draws with exposed sandstone layers. No perennial streams occur in the drainage. Individual draws or washes are ephemeral with spring runoff or flows from sometimes-intense summer rainstorms. No springs exist in the area. There is an occasional constructed pond furnishing water for antelope and livestock.

There is an existing well at this site, the NBU 190. This well will be PA'd and the pad will be used in the construction of the new pad.

This is a proposed single well location. Both the surface and minerals are owned by SITLA.

#### Surface Use Plan

**Current Surface Use** 

Grazing Wildlfe Habitat Existing Well Pad

New Road Miles Well Pad Src Const Material Surface Formation

0.1 Width 500 Length 500 Onsite UNTA

Ancillary Facilities Y

Waste Management Plan Adequate? Y

#### Environmental Parameters

Affected Floodplains and/or Wetlands N

#### Flora / Fauna

Prickly pear, wild onion, shadscale, mat saltbrush, Indian ricegrass, halogeton, pepper grass, annuals and curly Vegetation is a salt desert shrub type. Principal species present are cheatgrass, black sagebrush, stipa, mesquite grass.

Sheep, antelope, raptors, small mammals and birds.

#### **Soil Type and Characteristics**

11/29/2011 Page 1

Rocky sandy clay loam.

**Erosion Issues** N

**Sedimentation Issues** N

Site Stability Issues N

**Drainage Diverson Required?** N

Berm Required? N

**Erosion Sedimentation Control Required?** N

Paleo Survey Run? Y Paleo Potental Observed? N Cultural Survey Run? Y Cultural Resources? N

#### **Reserve Pit**

Site-Specific Factors

Site Ranking

Distance to Groundwater (feet)
Distance to Surface Water (feet)
Dist. Nearest Municipal Well (ft)
Distance to Other Wells (feet)
Native Soil Type
Fluid Type
Drill Cuttings
Annual Precipitation (inches)
Affected Populations
Presence Nearby Utility Conduits

**Final Score** 

Sensitivity Level

#### Characteristics / Requirements

This site will not have a reserve pit.

Closed Loop Mud Required? Y Liner Required? Liner Thickness Pit Underlayment Required?

#### Other Observations / Comments

Anadarko proposes to drill this well with a horizontal section of the well bore reaching approx. .75 miles. The pad will be approx. ten acres in size. This excess size will be necessary to accommodate 180 frac tanks during the initial completion of the well. Because of the anticipated congestion, two access roads will be necessary. One already exists and one will be constructed.

David Hackford 10/12/2011

Evaluator Date / Time

11/29/2011 Page 2

# **Application for Permit to Drill Statement of Basis**

11/29/2011 Utah Division of Oil, Gas and Mining

Page 1

APD NoAPI WellNoStatusWell TypeSurf OwnerCBM473743047520500000LOCKEDGWSNo

Operator KERR-MCGEE OIL & GAS ONSHORE, L.P. Surface Owner-APD

Well Name MAVERICK 921-26B-HZ Unit

Field NATURAL BUTTES Type of Work DRILL

Location NWNE 26 9S 21E S 681 FNL 1512 FEL GPS Coord (UTM) 626752E 4430185N

#### **Geologic Statement of Basis**

Kerr McGee proposes to set 2,653' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 420'. A search of Division of Water Rights records shows one water well within a 10,000 foot radius of the center of Section 26. The well is listed as 2,640 feet deep and used for oilfield drilling water. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. The proposed casing and cement should adequately protect any usable ground water.

Brad Hill **APD Evaluator** 

10/18/2011 **Date / Time** 

#### **Surface Statement of Basis**

The general area is in the central portion of the Natural Buttes Unit. Within this area is the White River and rugged drainages that drain into it. Topography is varied and frequently dissected by short draws or washes, which become overly steep as they approach the White River breaks or rim. Distance to the White River is approx. 3 miles to the northeast. The side drainages are dry except for ephemeral flows. No seeps or springs exist in the area. An occasional pond has been constructed to supply water for livestock and antelope. No drainage concerns exist, and no diversions will be needed. The pad as modified should be stable and sufficient for one well, and is the best site for a location in the immediate area. There is an existing well at this site. It is the NBU 190, and it will be PA'd.

Excess material will be stockpiled on the south and west side of the location.

Both the surface and minerals are owned by SITLA. Jim Davis of SITLA and Ben Williams with DWR were invited by email to the pre-site evaluation. Both were present. Kerr McGee personnel were told to consult with SITLA for reclamation standards including seeding mixes to be used.

U

David Hackford

Onsite Evaluator

10/12/2011 **Date / Time** 

**Conditions of Approval / Application for Permit to Drill** 

**Category** Condition

Pits A closed loop mud circulation system is required for this location.

**RECEIVED:** November 29, 2011

#### **WORKSHEET** APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 10/4/2011

WELL NAME: MAVERICK 921-26B-HZ

**OPERATOR:** KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995)

**CONTACT:** Andy Lytle

PROPOSED LOCATION: NWNE 26 090S 210E

**SURFACE: 0681 FNL 1512 FEL** 

**BOTTOM:** 0460 FSL 1780 FEL

**COUNTY: UINTAH** 

**LATITUDE: 40.01236** 

UTM SURF EASTINGS: 626752.00

FIELD NAME: NATURAL BUTTES

LEASE TYPE: 3 - State

**LEASE NUMBER:** UT ST ML 22934

**SURFACE OWNER: 3 - State** 

**API NO. ASSIGNED:** 43047520500000

**PHONE NUMBER:** 720 929-6100

**Permit Tech Review:** 

**Engineering Review:** 

Geology Review:

LONGITUDE: -109.51485 NORTHINGS: 4430185.00

PROPOSED PRODUCING FORMATION(S): GREEN RIVER

**COALBED METHANE: NO** 

#### **RECEIVED AND/OR REVIEWED:**

PLAT

Bond: STATE - 22013542

**Potash** 

Oil Shale 190-5

Oil Shale 190-3

Oil Shale 190-13

Water Permit: 43-8496

**RDCC Review:** 

**Fee Surface Agreement** 

Intent to Commingle

**Commingling Approved** 

**LOCATION AND SITING:** 

R649-2-3.

Unit:

R649-3-2. General

R649-3-3. Exception

**Drilling Unit** 

Board Cause No: R649-3-2.6

**Effective Date:** 

Siting:

R649-3-11. Directional Drill

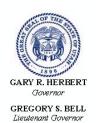
Presite Completed TEMP 640 ACRE SPACING: **Comments:** 

Stipulations: 1 - Exception Location - bhill

Statement of Basis - bhill

17 - Oil Shale 190-5(b) - dmason 25 - Surface Casing - ddoucet 26 - Temporary Spacing - bhill 27 - Other - bhill

API Well No: 43047520500000



## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

#### **Permit To Drill**

\*\*\*\*\*\*

Well Name: MAVERICK 921-26B-HZ

API Well Number: 43047520500000 Lease Number: UT ST ML 22934

**Surface Owner:** STATE **Approval Date:** 11/29/2011

#### Issued to:

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

#### **Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-2.6. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### **Exception Location:**

Appropriate information has been submitted to DOGM and administrative approval of the requested exception to Cause # 197-1 is hereby granted.

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### **Conditions of Approval:**

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Surface casing shall be cemented to the surface.

A temporary 640 acre spacing unit is hereby established in Section 26, Township 9 S, Range 21 E for the drilling of this well (R649-3-2.6). No other horizontal wells may be drilled in this section unless approved by the Board of Oil, Gas and Mining.

API Well No: 43047520500000

In accordance with Utah Admin. R.649-3-21, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

#### **Additional Approvals:**

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan contact Dustin Doucet
- Significant plug back of the well contact Dustin Doucet
- Plug and abandonment of the well contact Dustin Doucet

#### **Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well contact Carol Daniels OR
- submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at http://oilgas.ogm.utah.gov
- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to cementing or testing casing contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program

   contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well contact Dan Jarvis

#### **Contact Information:**

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 office
- Dustin Doucet 801-538-5281 office

801-733-0983 - after office hours

• Dan Jarvis 801-538-5338 - office

801-231-8956 - after office hours

#### **Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

Annuariad Drie

API Well No: 43047520500000

Арргочеи ду:

For John Rogers Associate Director, Oil & Gas

	STATE OF UTAH		FORM 9
ı	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	ì	5.LEASE DESIGNATION AND SERIAL NUMBER: UT ST ML 22934
SUNDR	RY NOTICES AND REPORTS ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	pposals to drill new wells, significantly deep reenter plugged wells, or to drill horizontal I n for such proposals.		7.UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: MAVERICK 921-26B-HZ
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.		9. API NUMBER: 43047520500000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	PHO h Street, Suite 600, Denver, CO, 80217 377	<b>NE NUMBER:</b> 9 720 929-6	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE:			COUNTY: UINTAH
0681 FNL 1512 FEL QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NWNE Section: 2	<b>HIP, RANGE, MERIDIAN:</b> 26 Township: 09.0S Range: 21.0E Meridian:	S	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDICATE NA	ATURE OF NOTICE, REPOR	T, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
NOTICE OF INTENT Approximate date work will start: 2/16/2012  SUBSEQUENT REPORT Date of Work Completion:  SPUD REPORT Date of Spud:  DRILLING REPORT REPORT Date:  12. DESCRIBE PROPOSED OR	CHANGE TO PREVIOUS PLANS  CHANGE WELL STATUS  DEEPEN  OPERATOR CHANGE  PRODUCTION START OR RESUME  REPERFORATE CURRENT FORMATION  TUBING REPAIR	CHANGE TUBING COMMINGLE PRODUCING FORMATIONS FRACTURE TREAT PLUG AND ABANDON RECLAMATION OF WELL SITE SIDETRACK TO REPAIR WELL VENT OR FLARE SI TA STATUS EXTENSION DITHER retinent details including dates, d	CASING REPAIR  CHANGE WELL NAME  CONVERT WELL TYPE  NEW CONSTRUCTION  PLUG BACK  RECOMPLETE DIFFERENT FORMATION  TEMPORARY ABANDON  WATER DISPOSAL  APD EXTENSION  OTHER:
921-26B well pad lo approved disturban	rests approval to add a reserve ocation. The reservoir pit will be oce. No new disturbance will oce of the see that attached well part and you.	e included in already cur with the addition d design documents.	Approved by the Utah Division of Oil, Gas and Mining  Date: February 17, 2012  By:
NAME (PLEASE PRINT) Jaime Scharnowske	<b>PHONE NUMBER</b> 720 929-6304	TITLE Regulartory Analyst	
SIGNATURE N/A		<b>DATE</b> 2/16/2012	



#### The Utah Division of Oil, Gas, and Mining

- State of UtahDepartment of Natural Resources

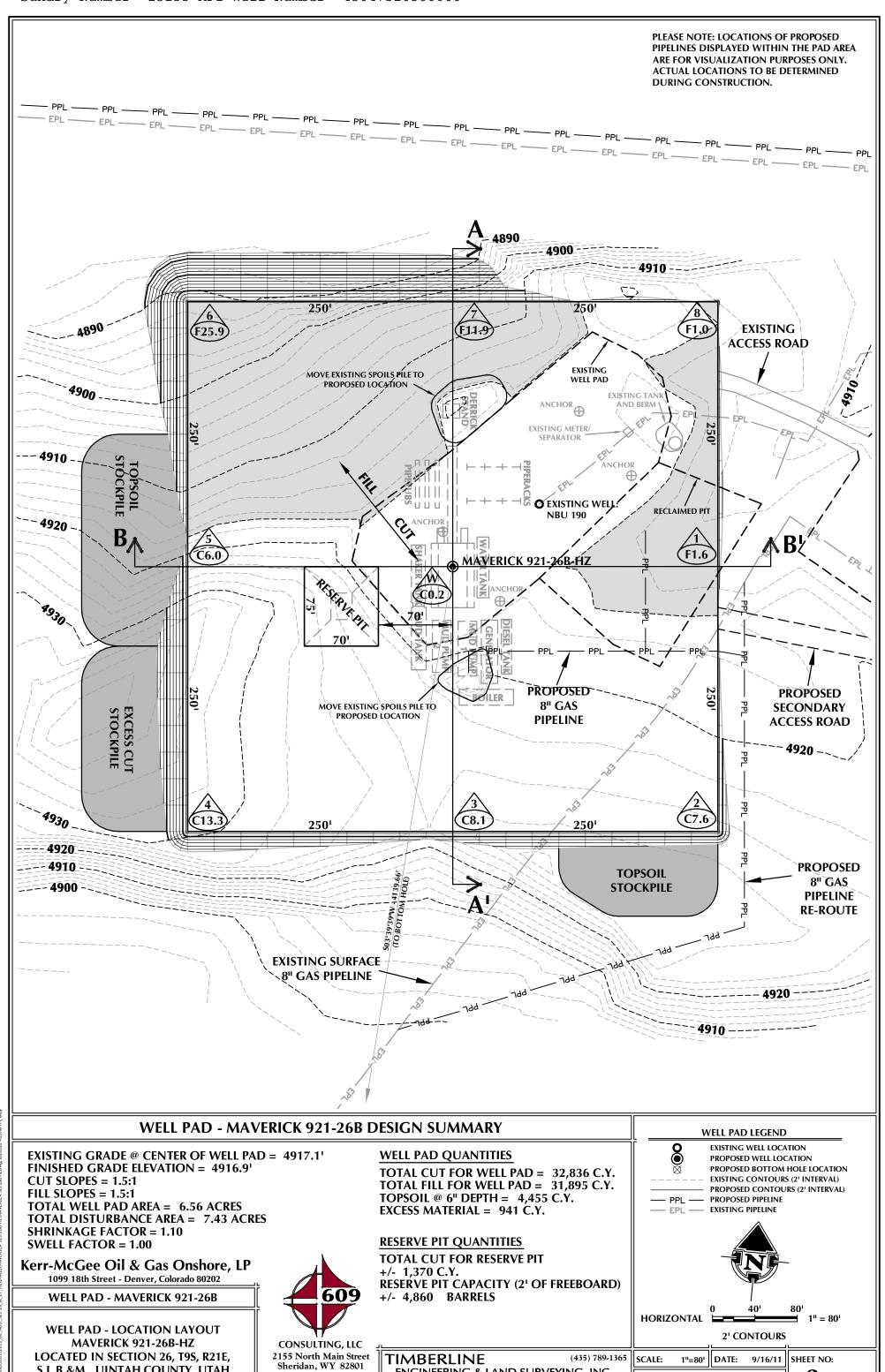
**Electronic Permitting System - Sundry Notices** 

Sundry Conditions of Approval Well Number 43047520500000

A synthetic liner with a minimum thickness of 30 mils with a felt subliner shall be properly installed and maintained in the pit.

RECEIVED: Feb. 17, 2012

S.L.B.&M., UINTAH COUNTY, UTAH



ENGINEERING & LAND SURVEYING, INC.

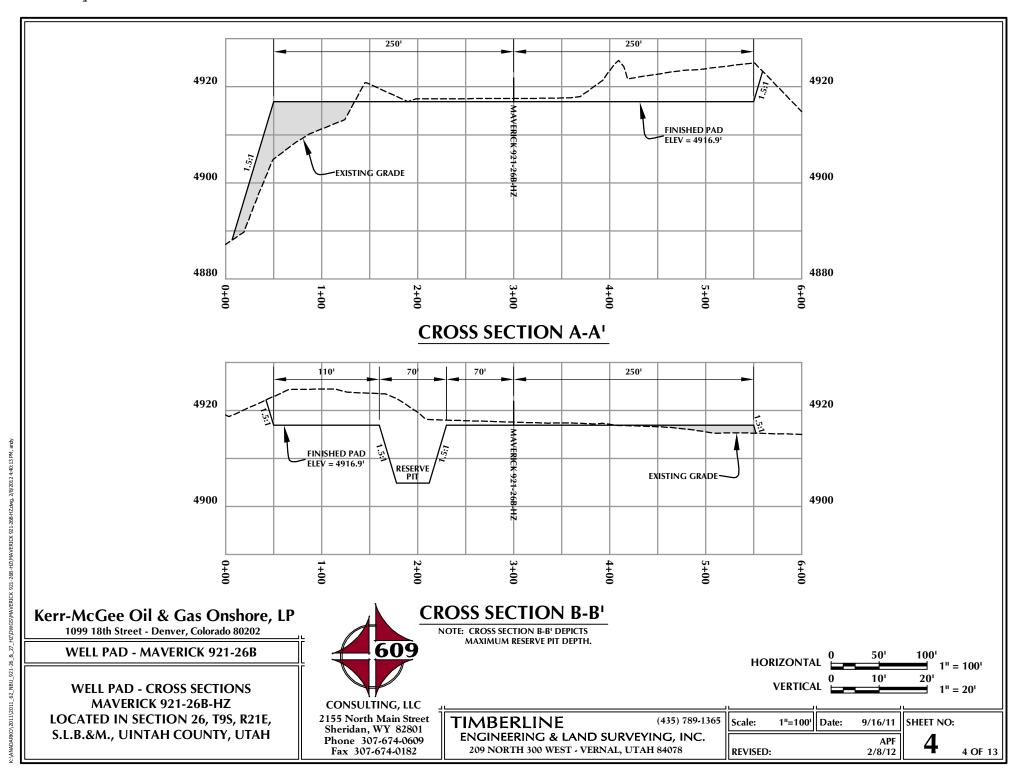
209 NORTH 300 WEST - VERNAL, UTAH 84078

Phone 307-674-0609 Fax 307-674-0182

**REVISED:** 

3

3 OF 13



	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MINI		5.LEASE DESIGNATION AND SERIAL NUMBER: UT ST ML 22934
SUNDR	RY NOTICES AND REPORTS C	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	oposals to drill new wells, significantly d reenter plugged wells, or to drill horizon n for such proposals.		7.UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: MAVERICK 921-26B-HZ
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.		9. API NUMBER: 43047520500000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18tl	h Street, Suite 600, Denver, CO, 80217	PHONE NUMBER: 3779 720 929-6	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0681 FNL 1512 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH	<b>HP, RANGE, MERIDIAN:</b> 26 Township: 09.0S Range: 21.0E Meridi	an: S	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOF	₹T, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT Date of Spud:	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
2/21/2012	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
_	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
	WILDCAT WELL DETERMINATION	OTHER	OTHER:
MIRU TRIPPLE A BU RAN 14" 36.7# SCI W	COMPLETED OPERATIONS. Clearly show al JCKET RIG. DRILLED 20" CONI HEDULE 10 PIPE. CMT W/28 S ELL ON 02/21/2012 AT 0800	DUCTOR HOLE TO 40'. X READY MIX. SPUD HRS.	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY February 28, 2012
NAME (PLEASE PRINT) Sheila Wopsock	<b>PHONE NUMBE</b> 435 781-7024	R TITLE Regulatory Analyst	
SIGNATURE N/A		<b>DATE</b> 2/22/2012	

	STATE OF UTAH		FORM 9
ι	DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS, AND MII		5.LEASE DESIGNATION AND SERIAL NUMBER: UT ST ML 22934
SUNDR	Y NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	posals to drill new wells, significantly reenter plugged wells, or to drill horizon for such proposals.		7.UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: MAVERICK 921-26B-HZ
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047520500000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 8021	<b>PHONE NUMBER:</b> 7 3779 720 929-0	9. FIELD and POOL or WILDCAT: 5M&TURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0681 FNL 1512 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH	<b>HIP, RANGE, MERIDIAN:</b> 26 Township: 09.0S Range: 21.0E Mer	idian: S	STATE: UTAH
11. CHECK	K APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
✓ DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
2/26/2012	WILDCAT WELL DETERMINATION	OTHER	OTHER:
	COMPLETED OPERATIONS. Clearly show	U OTHER	<u> </u>
MIRU AIR RIG ON 2,690'. RAN SURFA	FEBRUARY 22, 2012. DRILLE CE CASING AND CEMENTED ILS OF CEMENT JOB WILL BE COMPLETION REPORT.	ED SURFACE HOLE TO D. WELL IS WAITING ON E INCLUDED WITH WELL	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY March 02, 2012
NAME (PLEASE PRINT) Jaime Scharnowske	<b>PHONE NUME</b> 720 929-6304	BER TITLE Regulartory Analyst	
SIGNATURE N/A		<b>DATE</b> 2/27/2012	

## CONFIDENTIAL

## BLM - Vernal Field Office - Notification Form

	rator KERR-McGEE OIL & GA			
	mitted By SHEILA WOPSOCH		nber <u>435.</u>	781.7024
Well	Name/Number MAVERICK !	921-26B HZ		
_	Qtr <u>NW/NE</u> Section <u>26</u>		<u>s</u> R	lange <u>21E</u>
	e Serial Number <u>UT ST ML-2</u>	22934		
API	Number <u>4304752050</u>			
-	<u>d Notice</u> – Spud is the initia pelow a casing string.	l spudding o	of the we	ll, not drilling
	Date/Time <u>02/21/2012</u>	0900 HRS	AM 🗸	PM 🗌
<u>Casi</u> time	<u>ng</u> – Please report time cas s.	ing run star	ts, not c	ementing
$\checkmark$	Surface Casing			RECEIVED
	Intermediate Casing			FEB 2 0 2012
	Production Casing			
	Liner Other		DIV	OF OIL, GAS & MINING
	Date/Time <u>02/24/2012</u>	0800 HRS	AM 🔽	РМ
BOP	E Initial BOPE test at surface BOPE test at intermediate 30 day BOPE test Other			
	Date/Time		AM 🗌	PM
Rem	arks ESTIMATED DATE AND LOVEL YOUNG AT 435.	TIME. PLEA <del>781.7051 FO</del>	SE CONT R MORE	TACT

## STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

			ENTITY ACTION	FORM				
erator:	KERR	McGEE OIL & GAS ON	SHORE LP	_ Oper	ator Acc	ount Nu	mber: <u>N</u>	2995
ldress:	1368 S	OUTH 1200 EAST						
	city VE	RNAL						
	state U	T	zip 84078		135) 781-7024			
Vell 1	•							
API Nu	ımber	Well	Name	QQ	Sec	Twp	Rng	County
43047		MAVERICK 921-26B	HZ	NWNE	26	98	21E	UINTAH
Action	Code	Current Entity Number	New Entity Number	s	pud Dat	е		ty Assignment ffective Date
<u></u>	7	99999	18433	2	/21/201	2	218	G10012
Commen	ts: MIRI	TRIPPLE A BUCKET WELL ON 02/21/2012	RIG	LSW	SE_	C		ENTIAL
Vell 2		T NAZ.II	Nama	I 00	Sac	Two	Png	County
API N	umber		Name	QQ	Sec 18	Twp 9S	Rng 21E	County
API Ni 43047	umber 750790 n Code	Well NBU 921-18M Current Entity Number	Name  New Entity Number	swsw	Sec 18 pud Da	98	21E Ent	
API No 43047 Action	750790 • Code	NBU 921-18M  Current Entity	New Entity Number	swsw	18	9S te	21E Ent	UINTAH ity Assignment ffective Date
API No 43047 Action	750790  a Code  3  ats: MIRL	NBU 921-18M  Current Entity  Number	New Entity Number  2900	swsw	18 pud Da	9S te	21E Ent	UINTAH ity Assignment ffective Date
API No 43047 Action	750790  a Code  3  ats: MIRL	NBU 921-18M  Current Entity Number  99999  J TRIPPLE A BUCKET	New Entity Number  2900	swsw	18 pud Da	9S te	21E Ent	UINTAH ity Assignment ffective Date
API Ni 43047 Action  Commer	750790  a Code  3  ats: MIRL	NBU 921-18M  Current Entity Number  99999  J TRIPPLE A BUCKET D WELL ON 02/21/201	New Entity Number  2900	swsw	18 pud Da	9S te	21E Ent	UINTAH ity Assignment ffective Date
API Ni 43047 Action  Commer  USM  Well 3  API N	750790  n Code  S  nts: MIRU SPUI	NBU 921-18M  Current Entity Number  99999  J TRIPPLE A BUCKET D WELL ON 02/21/201	New Entity Number 2900 RIG. 2 AT 1300 HRS.	swsw	18 pud Da 2/21/201	9S te 2	Ent E	UINTAH ity Assignment iffective Date
API Ni 43047 Action  Commer  USM  Well 3  API N	Code S MIRU SPUI	NBU 921-18M  Current Entity Number  99999  J TRIPPLE A BUCKET D WELL ON 02/21/201  Well  Current Entity	New Entity Number  2000  RIG. 2 AT 1300 HRS.	swsw	18 pud Da	9S te 2	Ent E	UINTAH ity Assignment iffective Date  2 9 1 2013  County

#### **ACTION CODES:**

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- Re-assign well from one existing entity to another existing entity
- D Re-assign well from one existing entity to a new entity
- E Other (Explain in 'comments' section)

RECEIVED

A T Book Safe Book I W

FEB 2 7 2012

Div. of Oil, Gas & Mining

SHEILA WOPSOCK

Name (Please Print)

Signature

REGULATORY ANALYST

Title

2/22/2012

Date

(5/2000)

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURC DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UT ST ML 22934
SUNDF	RY NOTICES AND REPORTS (	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	oposals to drill new wells, significantly or reenter plugged wells, or to drill horizon n for such proposals.		7.UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: MAVERICK 921-26B-HZ
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.		9. API NUMBER: 43047520500000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18t	h Street, Suite 600, Denver, CO, 80217	<b>PHONE NUMBER:</b> 3779 720 929-	9. FIELD and POOL or WILDCAT: 65NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE:			COUNTY: UINTAH
0681 FNL 1512 FEL QTR/QTR, SECTION, TOWNSI Qtr/Qtr: NWNE Section:	<b>HIP, RANGE, MERIDIAN:</b> 26 Township: 09.0S Range: 21.0E Merio	lian: S	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	✓ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
2/21/2012	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
Report Date:	WILDCAT WELL DETERMINATION	OTHER	OTHER:
12 DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show a	Il pertinent details including dates	denths volumes atc
The operator reque for the subject we change the transit well. The new de	ests to approval for changes ell. Specifically, the operator ion from the vertical to the h sign will build to the south disee the attached drilling plan survey. Thank you.	to the original drill plan requests approval to orizontal lateral of the rectly off the vertical	Approved by the Utah Division of Oil, Gas and Mining  Date: March 13, 2012  By: Dark Our
NAME (PLEASE PRINT)	PHONE NUMBI	ER   TITLE	
Jaime Scharnowske	720 929-6304	Regulartory Analyst	
SIGNATURE N/A		<b>DATE</b> 2/21/2012	

Maverick 921-26B-HZ Drilling Program
1 of 8

#### Kerr-McGee Oil & Gas Onshore. L.P.

#### MAVERICK 921-26B-HZ

Surface: 681 FNL / 1512 FEL NWNE BHL: 460 FSL / 1780 FEL SWSE

Section 26 T9S R21E

Unitah County, Utah

Mineral Lease: UT ST UO 01194 ST/UT ST ML 22934

#### **ONSHORE ORDER NO. 1**

#### **DRILLING PROGRAM**

## Estimated Tops of Important Geologic Markers: Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	1518	Water
Birds Nest	1719	Water
Mahogany	2202	Water
Uteland Butt€	4700	Oil/Gas
TVD	4608	
TMD	8612	

#### 3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please refer to the attached Drilling Program

#### 4. <u>Proposed Casing & Cementing Program:</u>

Please refer to the attached Drilling Program

#### 5. <u>Drilling Fluids Program:</u>

Please refer to the attached Drilling Program

#### 6. <u>Evaluation Program</u>:

Please refer to the attached Drilling Program

Maverick 921-26B-HZ Drilling Program 2 of 8

#### 7. <u>Abnormal Conditions</u>:

Maximum anticipated bottom hole pressure calculated at 4610' TVD, approximately equals 2,028 psi

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 1,263 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

#### 8. <u>Anticipated Starting Dates:</u>

Drilling is planned to commence immediately upon approval of this application.

#### 9. <u>Variances:</u>

Please refer to the attached Drilling Program. Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- · Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

#### **Background**

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may

Maverick 921-26B-HZ Drilling Program
3 of 8

be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12 1/4 inch hole for the first 200 feet, then will drill a 11inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

#### Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

#### Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

#### Variance for Special Drilling Operation (surface equipment placement) Requirements

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KM well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and

on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Maverick 921-26B-HZ Drilling Program
4 of 8

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

#### Variance for FIT Requirements

KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

#### Conclusion

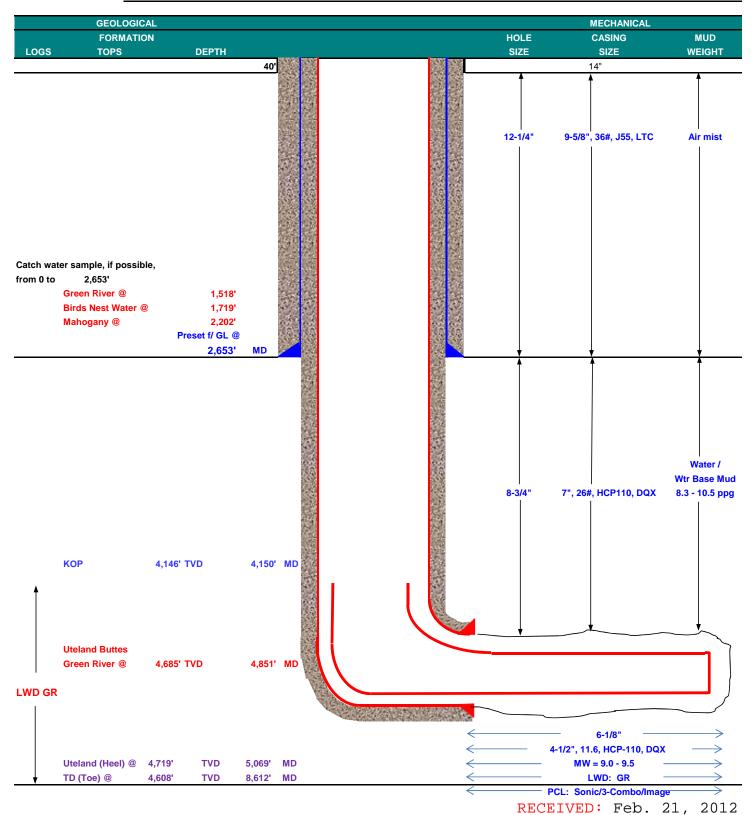
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

#### 10. <u>Other Information:</u>

Please refer to the attached Drilling Program.

# KerrMcGee Kerr McGee Oil and Gas Onshore LP DRILLING PROGRAM

COMPANY NAME Kerr McGee Oil and Gas Onshore LP February 21, 2012 Maverick 921-26B-HZ 4,608' WELL NAME TVD 8,612' MD KB 15' FIELD Natural Buttes COUNTY Uintah STATE Utah **ELEVATION** 4,917' GL KB 4,932' SURFACE LOCATION NWNE Sec 26, T9S, R21E 681' FNL 1512' FEL SWSE Sec 26, T9S, R21E 460' FSL 1780' FEL BTM HOLE LOCATION 40.012395 NAD 27 Surface -109.514219 Latitude: 40.001057 -109.515154 NAD 27 BHL Longitude: OBJECTIVE ZONE(S) Uteland Buttes--Green River Regulatory Agencies: UDOGM (MINERALS AND SURFACE) and UDOGM Tri-County Health Dept. ADDITIONAL INFO



# Kerr McGee Oil and Gas Onshore LP DRILLING PROGRAM

#### **CASING PROGRAM**

							DESIGN FACTORS			
	SIZE	INTE	RVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'								
								3520	2020	453000
SURFACE	9-5/8"	0	to	2,653'	36.00	J55	LTC	2.79**	1.63	5.50
								9960	6230	830000
INTERMEDIATE	7"	0	to	5,069'	26.00	HCP-110	DQX	4.38	2.74	7.91
								10690	7580	367000
PRODUCTION	4-1/2"	4,050'	to	8,612'	11.60	HCP-110	DQX	84.45	3.33	18.74

1) Max Anticipated Surf. Pre 9.5 ppg)

.22 psi/ft = gradient for partially evac wellbore

2) MASP (Prod Casing) = Pore Pressure at TD - (.22 psi/ft-partial evac gradient x TD (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water) (Burst Assumptions: TIpsi

(Burst Assumptions. Tips

(Collapse Assumption: Fully Evacuated Casing, Max MW)

MASP 1263

Burst SF is low but casing is much stronger than formation at 2653'. EMW @ 2653' for 3520# is 25.5 ppg or 1.33 psi/ft

CEMENT PR	OGRAM	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD				
LEAD		500	Premium cmt + 2% CaCl <sub>2</sub>	215	60%	15.60	1.18				
			+ .25 pps flocele								
SURFACE	SURFACE TOP OUT CMT (1) 200		20 gals sodium silicate + Premium cmt	50		15.60	1.18				
Option 1			+ 2% CaCl <sub>2</sub> + .25 pps flocele								
	TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl <sub>2</sub>	as req.		15.60	1.18				
		NOTE: If well will circulate water to surface, option 2 will be utilized									
	LEAD	2,153'	65/35 Poz + 6% Gel + 10 pps gilsonite	510	35%	12.60	1.81				
SURFACE			+.25 pps Flocele + 3% salt BWOW								
Option 2	TAIL	500	Premium cmt + 2% CaCl <sub>2</sub>	180	35%	15.60	1.18				
			+ .25 pps flocele								
	TOP OUT CMT	as required	Premium cmt + 2% CaCl <sub>2</sub>	as req.		15.60	1.18				
	LEAD	3,650'	Premium Lite II + 3% KCI + 0.25 pps	310	10%	12.50	1.98				
			celloflake + 5 pps gilsonite + 10% gel								
INTERMEDIA	ATE .		+ 0.5% extender								
	TAIL	1,419'	50/50 Poz/G + 10% salt + 2% gel	210	10%	14.30	1.25				
			+.1% R-3								
	LEAD		No cement will be used on Packers Plus Completion System								
PRODUCTIO	N										
	TAIL										

<sup>\*\*</sup>Excess applied to the Lead slurry is calculated on Open hole Volume only.

#### **FLOAT EQUIPMENT & CENTRALIZERS**

	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.
SURFACE	
	Float shoe, 2 jt w/ centralizer on each, float collar. 1 centralizers on next 23 joints, total 25 centralizers
INTERMEDIATE	
	Packer Plus completion system
PRODUCTION	-

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 $<sup>{}^{\</sup>star}\text{Substitute}$  caliper hole volume plus 5% excess for LEAD if accurate caliper is obtained

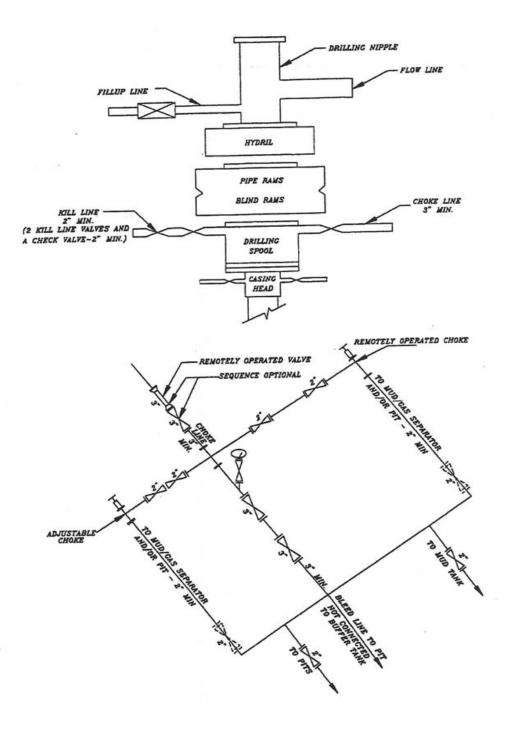
<sup>\*</sup>Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

#### ADDITIONAL INFORMATION

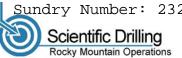
rest casing nead to	750 psi after installing. Test surface casing to 1,500 psi pr	rior to drilling out. Test intermediate casing to 4500 psi p	rior to drill out.						
BOPE: 11" 5M with	BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder &								
tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper									
& lower kelly valves.									
Survey with MWD ev	ery 100' during planned angle changes and every 500' wh	en maintaining angle.							
Most rigs have PVT	System for mud monitoring. If no PVT is available, visual n	nonitoring will be utilized.							
			0/00/0044						
	John Hunglin	DATE:	9/29/2011						
	John Huycke		9/29/2011						
G ENGINEER:	John Huycke	DATE:	9/29/2011						

DRILLING SUPERINTENDENT:

EXHIBIT A
MAVERICK 921-26B-HZ



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK



Sundry Number: 23214 API Well Newjeetr UTAH 04TM5 (2004), NAD27, Zone 12N

Site: MAVERICK 921-26B-HZ Well: MAVERICK 921-26B-HZ

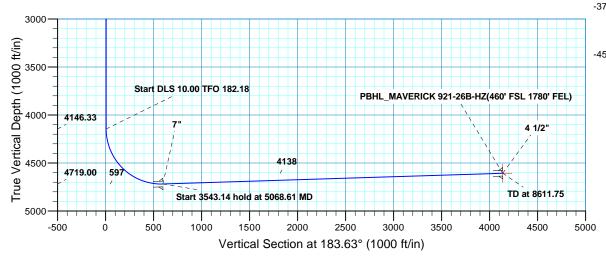
Design: PLAN #2

Wellbore: OH

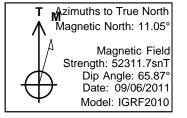
	WELL DETAILS: MAVERICK 921-26B-HZ											
GL 4917 & KB 4 @ 4921.00ft (ASSUMED)												
	+N/-S +E/-W Northing 0.00 0.00 14534026.53						Longitude -109.514219					
					DESIGN	TARGET DI	ETAILS					
Name PBHL	TVD 4607.50 - - plan hits target o	+N/-S 4129.38 enter	+E/- -261.		Nort 1452989	thing 93.37		Easting 6261.89		Latitude 40.001057	Longitude -109.515154	Shape Point
					SECT	ION DETAI	LS					
		00 5.00 00 5.00 00 0.00 58 0.00 61 91.80	0.00 0.00 270.00 270.00 270.00 270.00 182.18	1745.75	+N/-S 0.00 0.00 0.00 0.00 0.00 0.00 -590.56 -4129.38	+E/-W 0.00 0.00 -10.90 -93.70 -104.60 -104.60 -127.10 -261.92	Dleg 0.00 0.00 2.00 0.00 2.00 0.00 10.00	TFace 0.00 0.00 270.00 0.00 180.00 270.00 182.18 0.00	0.00 0.00 0.69 5.93 6.62 6.62	Target	:K 921-26B-HZ(460'	FSL 1780' FEL'

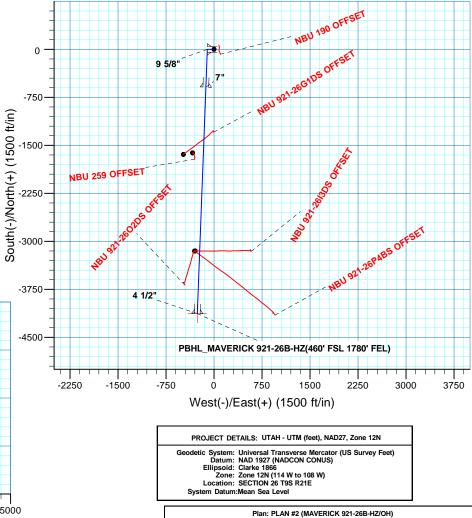
	FORMATION TOP DET	FAILS
1704.00 2187.00	MDPath Formation 1506.96 GREEN RIVER 1708.25 BIRDSNEST 2191.25 AHOGANY MARKER 4851.36 TELAND BUTTES	0.00 0.00 0.00 0.00

CASING DETAILS								
TVD 2648.7 4719.0 4607.5	0 5068.61	Name 9 5/8" 7" 4 1/2"	Size 9.625 7.000 4.500					









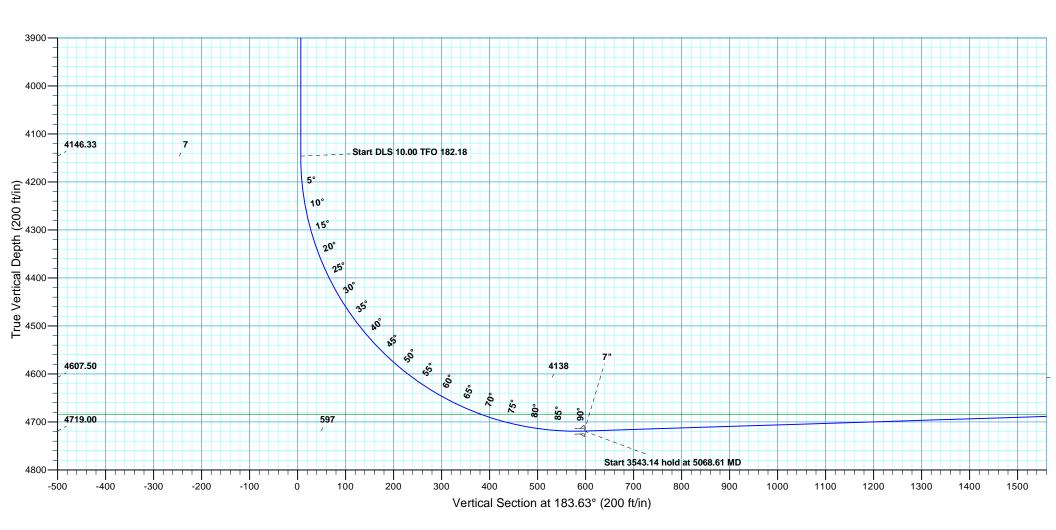
Created By: RobertScott Date: 11:01, February 03 2012

Scientific Drilling
Rocky Mountain Operations

Site: MAVERICK 921-26B-HZ Well: MAVERICK 921-26B-HZ

Wellbore: OH
Design: PLAN #2





Plan: PLAN #2 (MAVERICK 921-26B-HZ/OH)

Created By: RobertScott Date: 11:09, February 03 2012



## **US ROCKIES REGION PLANNING**

UTAH - UTM (feet), NAD27, Zone 12N MAVERICK 921-26B-HZ MAVERICK 921-26B-HZ

OH

Plan: PLAN #2

## **Standard Planning Report**

03 February, 2012



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#### **SDI** Planning Report



Database: EDM5000-RobertS-Local

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N

 Site:
 MAVERICK 921-26B-HZ

 Well:
 MAVERICK 921-26B-HZ

Wellbore: OH
Design: PLAN #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well MAVERICK 921-26B-HZ

GL 4917 & KB 4 @ 4921.00ft (ASSUMED) GL 4917 & KB 4 @ 4921.00ft (ASSUMED)

True

Minimum Curvature

Project UTAH - UTM (feet), NAD27, Zone 12N

Map System: Universal Transverse Mercator (US Survey Feet)

Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: Zone 12N (114 W to 108 W)

System Datum: Mean Sea Level

Site MAVERICK 921-26B-HZ, SECTION 26 T9S R21E

Northing: 14,534,026.54 usft Site Position: Latitude: 40.012395 From: Lat/Long Easting: 2,056,454.91 usft Longitude: -109.514219 **Position Uncertainty:** 0.00 ft Slot Radius: **Grid Convergence:** 0.96 13.200 in

Well MAVERICK 921-26B-HZ, 614 FNL 1486 FEL

 Well Position
 +N/-S
 0.00 ft
 Northing:
 14,534,026.54 usft
 Latitude:
 40.012395

 +E/-W
 0.00 ft
 Easting:
 2,056,454.91 usft
 Longitude:
 -109.514219

Position Uncertainty0.00 ftWellhead Elevation:Ground Level:4,917.00 ft

Wellbore ОН Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (nT) (°) (°) IGRF2010 09/06/11 11.05 65.87 52.312

PLAN #2 Design Audit Notes: Version: Phase: PLAN Tie On Depth: 0.00 **Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.00 0.00 0.00 183.63

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
550.00	5.00	270.00	549.68	0.00	-10.90	2.00	2.00	0.00	270.00	
1,500.00	5.00	270.00	1,496.07	0.00	-93.70	0.00	0.00	0.00	0.00	
1,750.00	0.00	270.00	1,745.75	0.00	-104.60	2.00	-2.00	0.00	180.00	
4,150.58	0.00	270.00	4,146.33	0.00	-104.60	0.00	0.00	0.00	270.00	
5,068.61	91.80	182.18	4,719.00	-590.56	-127.10	10.00	10.00	-9.57	182.18	
8,611.75	91.80	182.18	4,607.50	-4,129.38	-261.92	0.00	0.00	0.00	0.00	PBHL_MAVERICK 92

02/03/12 11:00:20AM Page 2 COMPASS 5000.1 Build 40

RECEIVED: Feb. 21, 2012

Sundry Number: 23214 API Well Number: 43047520500000



Project:

## **SDI**Planning Report



Database: EDM5000-RobertS-Local Company: US ROCKIES REGION P

US ROCKIES REGION PLANNING UTAH - UTM (feet), NAD27, Zone 12N

Site: MAVERICK 921-26B-HZ
Well: MAVERICK 921-26B-HZ

Wellbore: OH
Design: PLAN #2

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well MAVERICK 921-26B-HZ

GL 4917 & KB 4 @ 4921.00ft (ASSUMED) GL 4917 & KB 4 @ 4921.00ft (ASSUMED)

True

Minimum Curvature

Measured Depth (ft)  0.00 100.00 200.00 300.00 Start Build 2.0 400.00 500.00 550.00	2.00	Azimuth (°)  0.00 0.00 0.00 0.00 0.00	Vertical Depth (ft)  0.00 100.00 200.00 300.00	+N/-S (ft) 0.00 0.00	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate
0.00 100.00 200.00 300.00 Start Build 2.0 400.00 500.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	Depth (ft)  0.00 100.00 200.00	(ft) 0.00 0.00	(ft)	Section	Rate	Rate	Rate
100.00 200.00 300.00 <b>Start Build 2.0</b> 400.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00	100.00 200.00	0.00	0.00			( / 10011)	(°/100ft)
Start Build 2.0 400.00 500.00	2.00		วูบบ.บบ	0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
500.00									
	4.00	270.00 270.00	399.98 499.84	0.00	-1.75 -6.98	0.11 0.44	2.00 2.00	2.00 2.00	0.00 0.00
	5.00	270.00	549.68	0.00	-10.90	0.69	2.00	2.00	0.00
	old at 550.00 M		<b>500.40</b>	0.00	45.00	0.07	0.00	0.00	2.22
600.00	5.00	270.00	599.49	0.00	-15.26	0.97	0.00	0.00	0.00
700.00 800.00	5.00 5.00	270.00 270.00	699.11 798.73	0.00 0.00	-23.97 -32.69	1.52 2.07	0.00 0.00	0.00 0.00	0.00 0.00
900.00 1,000.00	5.00 5.00	270.00 270.00	898.35 997.97	0.00 0.00	-41.41 -50.12	2.62 3.17	0.00 0.00	0.00 0.00	0.00 0.00
1,100.00	5.00	270.00	1,097.59	0.00	-58.84	3.72	0.00	0.00	0.00
,	5.00	270.00	,				0.00		0.00
1,200.00 1,300.00	5.00	270.00	1,197.21 1,296.83	0.00 0.00	-67.55 -76.27	4.28 4.83	0.00	0.00 0.00	0.00
1,400.00 1,500.00	5.00 5.00	270.00 270.00	1,396.45 1,496.07	0.00 0.00	-84.98 -93.70	5.38 5.93	0.00 0.00	0.00 0.00	0.00 0.00
Start Drop -2.0 1,506.96	<b>00</b> 4.86	270.00	1,503.00	0.00	-94.30	5.97	2.00	-2.00	0.00
GREEN RIVER			,						
		070.00	4 505 00	0.00	400.07	0.07	2.00	0.00	0.00
1,600.00 1,700.00	3.00 1.00	270.00 270.00	1,595.82 1,695.75	0.00 0.00	-100.67 -104.16	6.37 6.59	2.00 2.00	-2.00 -2.00	0.00 0.00
1,708.25 BIRDSNEST	0.84	270.00	1,704.00	0.00	-104.30	6.60	2.00	-2.00	0.00
1,750.00	0.00	270.00	1,745.75	0.00	-104.60	6.62	2.00	-2.00	0.00
	hold at 1750.00								
1,800.00	0.00	270.00	1,795.75	0.00	-104.60	6.62	0.00	0.00	0.00
1,900.00	0.00	270.00	1,895.75	0.00	-104.60	6.62	0.00	0.00	0.00
2,000.00	0.00	270.00	1,995.75	0.00	-104.60	6.62	0.00	0.00	0.00
2,100.00 2,191.25	0.00 0.00	270.00 270.00	2,095.75 2,187.00	0.00 0.00	-104.60 -104.60	6.62 6.62	0.00 0.00	0.00 0.00	0.00 0.00
MAHOGANY N	MARKER								
2,200.00 2,300.00	0.00 0.00	270.00 270.00	2,195.75 2,295.75	0.00 0.00	-104.60 -104.60	6.62 6.62	0.00 0.00	0.00 0.00	0.00 0.00
2,400.00 2,500.00	0.00 0.00	270.00 270.00	2,395.75 2,495.75	0.00 0.00	-104.60 -104.60	6.62 6.62	0.00 0.00	0.00 0.00	0.00 0.00
2,600.00 2,653.00	0.00 0.00	270.00 270.00	2,595.75 2,648.75	0.00 0.00	-104.60 -104.60	6.62 6.62	0.00 0.00	0.00 0.00	0.00 0.00
9 5/8"	0.00	_, 0.00	_,010.70	0.00	.01.00	0.02	0.00	0.00	3.00
2,700.00	0.00	270.00	2,695.75	0.00	-104.60 104.60	6.62	0.00	0.00	0.00
2,800.00 2,900.00	0.00 0.00	270.00 270.00	2,795.75 2,895.75	0.00 0.00	-104.60 -104.60	6.62 6.62	0.00 0.00	0.00	0.00 0.00
3,000.00	0.00	270.00	2,995.75	0.00	-104.60	6.62	0.00	0.00	0.00
3,100.00	0.00	270.00	3,095.75	0.00	-104.60	6.62	0.00	0.00	0.00
3,200.00	0.00	270.00	3,195.75	0.00	-104.60	6.62	0.00	0.00	0.00
3,300.00	0.00	270.00	3,295.75	0.00	-104.60	6.62	0.00	0.00	0.00
3,400.00	0.00	270.00	3,395.75	0.00	-104.60	6.62	0.00	0.00	0.00
3,500.00	0.00	270.00	3,495.75	0.00	-104.60	6.62	0.00	0.00	0.00
3,600.00	0.00	270.00	3,595.75	0.00	-104.60	6.62	0.00	0.00	0.00
3,700.00	0.00	270.00	3,695.75	0.00	-104.60	6.62	0.00	0.00	0.00
3,800.00	0.00	270.00	3,795.75	0.00	-104.60	6.62	0.00	0.00	0.00

RECEIVED: Feb. 21, 2012

Sundry Number: 23214 API Well Number: 43047520500000



## **SDI**Planning Report



Database: EDM5000-RobertS-Local Company: US ROCKIES REGION P

Company: US ROCKIES REGION PLANNING
Project: UTAH - UTM (feet), NAD27, Zone 12N

Site: MAVERICK 921-26B-HZ
Well: MAVERICK 921-26B-HZ

Wellbore: OH
Design: PLAN #2

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well MAVERICK 921-26B-HZ

GL 4917 & KB 4 @ 4921.00ft (ASSUMED) GL 4917 & KB 4 @ 4921.00ft (ASSUMED)

True

Minimum Curvature

Design:		PLAN #2								
Diamond	C									
Planned	Survey									
	Measured			Vertical			Vertical	Doglas	Build	Turn
	Depth	la alia ati an	A!4l-	Depth	. N/ O	+E/-W	Section	Dogleg Rate	Rate	Rate
	(ft)	Inclination	Azimuth	(ft)	+N/-S		(ft)	(°/100ft)	(°/100ft)	(°/100ft)
	(11)	(°)	(°)	(11)	(ft)	(ft)	(11)	( / 10011)	(710011)	(710011)
	3,900.00	0.00	270.00	3,895.75	0.00	-104.60	6.62	0.00	0.00	0.00
	4,000.00	0.00	270.00	3,995.75	0.00	-104.60	6.62	0.00	0.00	0.00
	4,100.00	0.00	270.00	4,095.75	0.00	-104.60	6.62	0.00	0.00	0.00
	4,150.58	0.00	270.00	4,146.33	0.00	-104.60	6.62	0.00	0.00	0.00
	Start DLS 10.	.00 TFO 182.18								
	4,200.00	4.94	182.18	4,195.69	-2.13	-104.68	8.75	10.00	10.00	-177.70
	4,300.00	14.94	182.18	4,294.06	-19.36	-105.34	25.99	10.00	10.00	0.00
	4,400.00	24.94	182.18	4,387.95	-53.40	-106.64	60.04	10.00	10.00	0.00
	4,500.00	34.94	182.18	4,474.49	-103.21	-108.53	109.87	10.00	10.00	0.00
	4,600.00	44.94	182.18	4,551.06	-167.28	-110.97	173.97	10.00	10.00	0.00
	4,700.00	54.94	182.18	4,615.34	-243.67	-113.88	250.39	10.00	10.00	0.00
	4,800.00	64.94	182.18	4,665.36	-330.05	-117.17	336.81	10.00	10.00	0.00
	4,851.36	70.08	182.18	4,685.00	-377.45	-118.98	384.23	10.00	10.00	0.00
	UTELAND BU		100 : 5	4.000.51	100 55	105 ==	100 ==	40.55	40.55	2.22
	4,900.00	74.94	182.18	4,699.61	-423.80	-120.75	430.59	10.00	10.00	0.00
	5,000.00	84.94	182.18	4,717.06	-522.07	-124.49	528.90	10.00	10.00	0.00
	5,068.61	91.80	182.18	4,719.00	-590.56	-127.10	597.42	10.00	10.00	0.00
	Start 3543.14	hold at 5068.61	MD - 7"							
	5,100.00	91.80	182.18	4,718.02	-621.91	-128.29	628.78	0.00	0.00	0.00
	5,200.00	91.80	182.18	4,714.87	-721.79	-132.10	728.70	0.00	0.00	0.00
	5,300.00	91.80	182.18	4,711.72	-821.66	-135.90	828.62	0.00	0.00	0.00
	5,400.00	91.80	182.18	4,708.58	-921.54	-139.71	928.54	0.00	0.00	0.00
	5,500.00	91.80	182.18	4,705.43	-1,021.42	-143.51	1,028.46	0.00	0.00	0.00
	5,600.00	91.80	182.18	4,702.28	-1,121.30	-147.32	1,128.38	0.00	0.00	0.00
	5,700.00	91.80	182.18	4,699.13	-1,221.18	-151.12	1,228.29	0.00	0.00	0.00
	5,800.00	91.80	182.18	4,695.99	-1,321.05	-154.93	1,328.21	0.00	0.00	0.00
	5,900.00	91.80	182.18	4,692.84	-1,420.93	-158.73	1,428.13	0.00	0.00	0.00
	6,000.00	91.80	182.18	4,689.69	-1,520.81	-162.54	1,528.05	0.00	0.00	0.00
	6 100 00	04.00	100 10	4 606 FF	1 620 60	166.24	1 627 07	0.00	0.00	0.00
	6,100.00 6,200.00	91.80 91.80	182.18 182.18	4,686.55 4,683.40	-1,620.69 -1,720.57	-166.34 -170.15	1,627.97 1,727.89	0.00 0.00	0.00 0.00	0.00 0.00
	6,300.00	91.80	182.18	4,680.25	-1,720.37	-170.15	1,827.81	0.00	0.00	0.00
	6,400.00	91.80	182.18	4,677.10	-1,920.32	-173.93	1,927.72	0.00	0.00	0.00
	6,500.00	91.80	182.18	4,673.96	-2,020.20	-181.56	2,027.64	0.00	0.00	0.00
	6,600.00	91.80	182.18	4,670.81	-2,120.08	-185.37	2,127.56	0.00	0.00	0.00
	6,700.00	91.80	182.18	4,667.66	-2,219.96	-189.17	2,227.48	0.00	0.00	0.00
	6,800.00	91.80	182.18	4,664.52	-2,319.84	-192.98	2,327.40	0.00	0.00	0.00
	6,900.00	91.80	182.18	4,661.37	-2,419.71	-196.78	2,427.32	0.00	0.00	0.00
	7,000.00	91.80	182.18	4,658.22	-2,519.59	-200.59	2,527.24	0.00	0.00	0.00
	7,100.00	91.80	182.18	4,655.08	-2,619.47	-204.39	2,627.15	0.00	0.00	0.00
	7,200.00	91.80	182.18	4,651.93	-2,719.35	-208.20	2,727.07	0.00	0.00	0.00
	7,300.00	91.80	182.18	4,648.78	-2,819.23	-212.00	2,826.99	0.00	0.00	0.00
	7,400.00	91.80	182.18	4,645.63	-2,919.10	-215.81	2,926.91	0.00	0.00	0.00
	7,500.00	91.80	182.18	4,642.49	-3,018.98	-219.61	3,026.83	0.00	0.00	0.00
	7,600.00	91.80	182.18	4,639.34	-3,118.86	-223.42	3,126.75	0.00	0.00	0.00
	7,700.00	91.80	182.18	4,636.19	-3,218.74	-227.22	3,226.67	0.00	0.00	0.00
	7,800.00	91.80	182.18	4,633.05	-3,318.62	-231.03	3,326.58	0.00	0.00	0.00
	7,900.00	91.80	182.18	4,629.90	-3,418.49	-234.83	3,426.50	0.00	0.00	0.00
	8,000.00	91.80	182.18	4,626.75	-3,518.37	-238.64	3,526.42	0.00	0.00	0.00
	8,100.00	91.80	182.18	4,623.61	-3,618.25	-242.44	3,626.34	0.00	0.00	0.00
	8,200.00	91.80	182.18	4,620.46	-3,718.13	-246.25	3,726.26	0.00	0.00	0.00
	8,300.00	91.80	182.18	4,617.31	-3,818.01	-250.05	3,826.18	0.00	0.00	0.00
	8,400.00	91.80	182.18	4,614.16	-3,917.88	-253.86	3,926.10	0.00	0.00	0.00
	8,500.00	91.80	182.18	4,611.02	-4,017.76	-257.66	4,026.01	0.00	0.00	0.00
	*			*	•		*			

RECEIVED: Feb. 21, 2012

Sundry Number: 23214 API Well Number: 43047520500000



Project:

## **SDI**Planning Report



Database: EDM5000-RobertS-Local
Company: US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N

Site: MAVERICK 921-26B-HZ
Well: MAVERICK 921-26B-HZ

Wellbore: OH
Design: PLAN #2

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well MAVERICK 921-26B-HZ

GL 4917 & KB 4 @ 4921.00ft (ASSUMED) GL 4917 & KB 4 @ 4921.00ft (ASSUMED)

True

Minimum Curvature

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,600.00 8,611.75 <b>TD at 8611.7</b>	91.80 91.80 <b>5 - 4 1/2" - PBHL</b>	182.18 182.18 _MAVERICK 92	4,607.87 4,607.50 21-26B-HZ(460'	-4,117.64 -4,129.38 FSL 1780' FEL)	-261.47 -261.91	4,125.93 4,137.67	0.00 0.00	0.00 0.00	0.00 0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL_MAVERICK 921-: - plan hits target cent - Point	0.00 ter	0.00	4,607.50	-4,129.38	-261.92	14,529,893.37	2,056,261.89	40.001057	-109.515154

Casing Points					
	Measured Depth (ft)	Vertical Depth (ft)	Nar	Casing Diameter ne (in)	Hole Diameter (in)
	2,653.00	2,648.75	9 5/8"	9.625	12.250
	5,068.61	4,719.00	7"	7.000	7.500
	8,611.75	4,607.50	4 1/2"	4.500	6.125

Formations					
	Measured Depth (ft)	Vertical Depth (ft)	Name	Dip (°)	Dip Direction (°)
	1,506.96	1,503.00	GREEN RIVER	0.00	
	1,708.25	1,704.00	BIRDSNEST	0.00	
	2,191.25	2,187.00	MAHOGANY MARKER	0.00	
	4,851.36	4,685.00	UTELAND BUTTES	0.00	

Plan Annotations					
Measured	Vertical	Local Coor	dinates		
Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment	
300.00	300.00	0.00	0.00	Start Build 2.00	
550.00	549.68	0.00	-10.90	Start 950.00 hold at 550.00 MD	
1,500.00	1,496.07	0.00	-93.70	Start Drop -2.00	
1,750.00	1,745.75	0.00	-104.60	Start 2400.58 hold at 1750.00 MD	
4,150.58	4,146.33	0.00	-104.60	Start DLS 10.00 TFO 182.18	
5,068.61	4,719.00	-590.56	-127.10	Start 3543.14 hold at 5068.61 MD	
8,611.75	4,607.50	-4,129.38	-261.92	TD at 8611.75	

RECEIVED: Feb. 21, 2012

## BLM - Vernal Field Office - Notification Form

Ope	rator <u>ANADARKO</u> Rig	g Name/# _	ENSIGN 13	9
Subr	nitted By SID ARMSTRO	<u>ONG</u> Phon	e Number <u>4</u>	35-828-0984
Well	Name/Number <del>NBI</del>	J <del>921-26B-</del>	HZ Maveric	k921-26B-HZ
	Qtr <u>NW/NE</u> Section _			
Leas	e Serial Number <u>UT S</u>	T ML 22934		
API	Number 430475205000	00		
-	d Notice – Spud is the ir below a casing string.	nitial spudd	ing of the w	ell, not drilling
	Date/Time		AM [	] PM [
<u>Casi</u> time	ng – Please report time s.	casing run	starts, not	cementing
	Surface Casing			RECEIVED
	Intermediate Casing			APR 1 0 2012
	Production Casing		DIV.	-
	Liner		Siv.	OF OIL, GAS & MINING
	Other			
	Date/Time	_ AM [	РМ	
ВОР	F			
	= Initial BOPE test at sur	face casing	point	
	BOPE test at intermedi		•	
	30 day BOPE test	_		
	Other			
	Date/Time 4/8/2012	20:00	AM	$PM \mid X \mid$

## BLM - Vernal Field Office - Notification Form

Operator <u>ANADARKO</u> Rig Name/# <u>ENSIGN 139</u>								
	tted By <u>SID ARMSTRONG</u> I							
Well N	ame/Number <u>-NBU-921</u>	26B-HZ maverice "	121-2613-42					
Qtr/Qt	r <u>NW/NE</u> Section <u>26</u>	_ Township <u>9S</u> Ran	ige 21E					
Lease	Serial Number <u>UT ST ML 2</u>	2934	····					
API Nu	umber 43047520500000							
<b>6</b>								
-	<u>Notice</u> – Spud is the initial sp	oudding of the well,	not drilling					
out be	low a casing string.							
D	oate/Time	AM [ ] F	PM 🗌					
Casing times.	и – Please report time casing	ı run starts, not cem	enting					
	urface Casing	RF	CEIVED					
<del></del>	ntermediate Casing		R 1 0 2012					
	roduction Casing	AF	K I U ZUIZ					
	iner	DIV. OF C	OIL, GAS & MINING					
	ther							
<del>-</del> "		5						
D	ate/Time <u>4/8/2012</u>	<u>08:00</u> AM ⊠	PM					
PODE								
BOPE T.	nitial PODE toot at curface or	ocina noint						
	nitial BOPE test at surface ca	<b>-</b> 1						
	OPE test at intermediate cas	sing point						
_	0 day BOPE test other							
	ici ici							
D	oate/Time A	M PM						
Remar	ks MAVERICK 921-26B-HZ	& WILL BE RUN 7"						
<b>INTER</b>	MEDIATE							

# Remarks <u>MAVERICK 921-26B-HZ & TESTING B.O.P'S @ INTERMEDIATE CASING 7"</u>

Sundry Number: 24086 API Well Number: 43047520500000

	STATE OF UTAH  DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN	-			FORM 9  DESIGNATION AND SERIAL NUMBER: VIL 22934		
SUNDR	Y NOTICES AND REPORTS	ON WE	ELLS	6. IF INDI	AN, ALLOTTEE OR TRIBE NAME:		
	posals to drill new wells, significantly reenter plugged wells, or to drill horizon n for such proposals.		7.UNIT o	CA AGREEMENT NAME:			
1. TYPE OF WELL Gas Well	CO.	NEIL	TENTIAL		NAME and NUMBER: NCK 921-26B-HZ		
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047520500000				
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 8021		NUMBER: 720 929-6		and POOL or WILDCAT: AL BUTTES		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0681 FNL 1512 FEL		CHENCE BURELLE GUORGE		COUNTY	-		
QTR/QTR, SECTION, TOWNSI Qtr/Qtr: NWNE Section: 2	<del>IIP, RANGE, MERIDIAN:</del> 26 Township: 09.0S Range: 21.0E Meri	idian: S	et weeken	STATE: UTAH			
11. CHECI	K APPROPRIATE BOXES TO INDICA	TE NATU	URE OF NOTICE, REPOR	T, OR 0	THER DATA		
TYPE OF SUBMISSION			TYPE OF ACTION				
	ACIDIZE	☐ ALTER	ER CASING		CASING REPAIR		
Approximate date work will start: 3/21/2012	CHANGE TO PREVIOUS PLANS	CHANGE	NGE TUBING		CHANGE WELL NAME		
	CHANGE WELL STATUS	Сомм	MINGLE PRODUCING FORMATIONS		CONVERT WELL TYPE		
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACT	CTURE TREAT		NEW CONSTRUCTION		
	OPERATOR CHANGE	PLUG	G AND ABANDON		PLUG BACK		
<b></b>	PRODUCTION START OR RESUME	RECLA	LAMATION OF WELL SITE		RECOMPLETE DIFFERENT FORMATION		
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETI	TRACK TO REPAIR WELL		TEMPORARY ABANDON		
	TUBING REPAIR	☐ VENT	Γ OR FLARE		WATER DISPOSAL		
D DRILLING REPORT	WATER SHUTOFF	SITA:	A STATUS EXTENSION		APD EXTENSION		
Report Date:	WILDCAT WELL DETERMINATION	<b>✓</b> OTHE	ER	OTHE	R: Pit Refurb / ACTS		
12 DESCRIBE PROPOSED OR		all pertine	pent details including dates, de	MALL SECTION AND ADDRESS.			
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  The operator is requesting to refurbish the existing pit on this pad site for completion operations. The refurbished pit will be relined per the requirements in the COA of the APD. Upon completion of the well on this pad, the operator is also requesting to utilize this pit as an ACTS staging pit to be used for other completion operations in the area. The trucks will unload water into tanks before the water is placed into the refurbished pit. The purpose of the frac tanks is to collect any hydro-carbons that may have been associated with the other completion operations before releasing into the pit. The operator plans to keep this pit open for 1 year. During this time the surrounding well location completion fluids will be recycled in this pit and utilized for other frac jobs in the surrounding sections. Thank you.  Approved by the							
Utah E	Division of and Mining						
Date: 4	13/12						
NAME (PLEYE PRINT)  Jaime Scharnowske	PHONE NUME 20 929-6304		ITLE Regulartory Analyst				
SIGNATURE N/A			ATE 3/21/2012	tropic postilist, and a "Entre Comba			

CONFIDENTIAL

## BLM - Vernal Field Office - Notification Form

Opei	rator <u>ANADARKO                                    </u>	me/# <u>ENSIGN 139</u>	
Subr	mitted By SID ARMSTRONG	Phone Number 435- 8	328-0984
	Name/Number <del>NBU 92</del>		
Qtr/0	Qtr <u>NW/NE</u> Section <u>26</u>	5 Township <u>9S</u> Rang	ge 21E
Leas	se Serial Number <u>UT ST ML</u>	22934	<u> </u>
API	Number 43047520500000_		
	<u>d Notice</u> – Spud is the initial below a casing string.	spudding of the well, r	not drilling
	Date/Time	AM [ P	М
<u>Casi</u> time	<u>ng</u> – Please report time casi s.	ng run starts, not ceme	enting
	Surface Casing	DEC	-WED
	Intermediate Casing		EIVED
	Production Casing	APR	1 7 2012
	Liner	DIV. OF OIL	, gas & mining
	Other		
	Date/Time <u>4-19-2012</u>	<u>10:00</u> AM ⊠	РМ
ВОР	E		
	= Initial BOPE test at surface	casing point	
	BOPE test at intermediate	•	
	30 day BOPE test		
	Other		
	Date/Time	AM PM	
	Dare/Time	AM PM I	

# Remarks <u>MAVERICK 921-26B-HZ RUN PROD CASING & WILL BE MOVING TO NBU 922 - 30B PAD</u>

## BLM - Vernal Field Office - Notification Form

Ope	rator <u>ANADARKO</u> Rig	g Name/# _	ENSIGN 13	9
Subr	nitted By SID ARMSTRO	<u>ONG</u> Phon	e Number <u>4</u>	35-828-0984
Well	Name/Number <del>NBI</del>	J <del>921-26B-</del>	HZ Maveric	k921-26B-HZ
	Qtr <u>NW/NE</u> Section _			
Leas	e Serial Number <u>UT S</u>	T ML 22934		
API	Number 430475205000	00		
-	d Notice – Spud is the ir below a casing string.	nitial spudd	ing of the w	ell, not drilling
	Date/Time		AM [	] PM [
<u>Casi</u> time	ng – Please report time s.	casing run	starts, not	cementing
	Surface Casing			RECEIVED
	Intermediate Casing			APR 1 0 2012
	Production Casing		DIV.	-
	Liner		Siv.	OF OIL, GAS & MINING
	Other			
	Date/Time	_ AM [	РМ	
ВОР	F			
	= Initial BOPE test at sur	face casing	point	
	BOPE test at intermedi		•	
	30 day BOPE test	_		
	Other			
	Date/Time 4/8/2012	20:00	AM	$PM \mid X \mid$

## BLM - Vernal Field Office - Notification Form

	tor <u>ANADARKO</u> Rig Name		
	tted By <u>SID ARMSTRONG</u> I		
Well N	ame/Number <u>-NBU-921</u>	26B-HZ maverice "	121-2613-42
Qtr/Qt	r <u>NW/NE</u> Section <u>26</u>	_ Township <u>9S</u> Ran	ige 21E
Lease	Serial Number <u>UT ST ML 2</u>	2934	····
API Nu	umber 43047520500000		
<b>6</b>			
-	<u>Notice</u> – Spud is the initial sp	oudding of the well,	not drilling
out be	low a casing string.		
D	oate/Time	AM [ ] F	PM 🗌
Casing times.	и – Please report time casing	ı run starts, not cem	enting
	urface Casing	RF	CEIVED
<del></del>	ntermediate Casing		R 1 0 2012
	roduction Casing	AF	K I U ZUIZ
	iner	DIV. OF C	OIL, GAS & MINING
	ther		
<del>-</del> "		5	
D	ate/Time <u>4/8/2012</u>	<u>08:00</u> AM ⊠	PM
PODE			
BOPE T.	nitial PODE toot at curface or	ocina noint	
	nitial BOPE test at surface ca	<b>-</b> 1	
	OPE test at intermediate cas	sing point	
_	0 day BOPE test other		
	ici ici		
D	oate/Time A	M PM	
Remar	ks MAVERICK 921-26B-HZ	& WILL BE RUN 7"	
<b>INTER</b>	MEDIATE		

# Remarks <u>MAVERICK 921-26B-HZ & TESTING B.O.P'S @ INTERMEDIATE CASING 7"</u>

Sundry Number: 25019 API Well Number: 43047520500000

	STATE OF UTAH		FORM 9
ı	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIN		5.LEASE DESIGNATION AND SERIAL NUMBER: UT ST ML 22934
SUNDR	Y NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	posals to drill new wells, significantly or reenter plugged wells, or to drill horizor n for such proposals.		7.UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: MAVERICK 921-26B-HZ
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047520500000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 80217	<b>PHONE NUMBER:</b> 3779 720 929-6	9. FIELD and POOL or WILDCAT: 5NATERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0681 FNL 1512 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 26 Township: 09.0S Range: 21.0E Merid	ian: S	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	UBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
4/21/2012	WILDCAT WELL DETERMINATION	OTHER	OTHER:
MIRU ROTARY RIG. 17, 2012. RAN 4-1/2 PRODUCTION CASIN 23:59 HRS. DETAILS	COMPLETED OPERATIONS. Clearly show a FINISHED DRILLING FROM 2 2" 11.6# P-110 PRODUCTION NG. RELEASED ENSIGN RIG 1 OF CEMENT JOB WILL BE INCEPORT. WELL IS WAITING ON ACTIVITIES.	690' TO 8600' ON APRIL I CASING. CEMENTED 39 ON APRIL 21, 2012 @ LUDED WITH THE WELL	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY May 09, 2012
NAME (PLEASE PRINT) Gina Becker	PHONE NUMBI		
SIGNATURE	720 929-6086	Regulatory Analyst II  DATE	
N/A		4/24/2012	

Sundry Number: 25969 API Well Number: 43047520500000

	STATE OF UTAH		FORM 9
ι	DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS, AND MI		5.LEASE DESIGNATION AND SERIAL NUMBER: UT ST ML 22934
SUNDR	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	pposals to drill new wells, significantly reenter plugged wells, or to drill horizon n for such proposals.		7.UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: MAVERICK 921-26B-HZ
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047520500000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	h Street, Suite 600, Denver, CO, 8021	<b>PHONE NUMBER:</b> 17 3779 720 929-0	9. FIELD and POOL or WILDCAT: 5MATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0681 FNL 1512 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH	<b>HIP, RANGE, MERIDIAN:</b> 26 Township: 09.0S Range: 21.0E Mer	ridian: S	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDICA	ATE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
Approximate date work will start:	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT	✓ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
✓ DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
5/21/2012			
	WILDCAT WELL DETERMINATION	OTHER	OTHER:
THE SUBJECT WEL 1100 HRS. THE CHF	COMPLETED OPERATIONS. Clearly show L WAS PLACED ON PRODU RONOLOGICAL WELL HISTOI TH THE WELL COMPLETION F	CTION ON 05/21/2012 AT RY WILL BE SUBMITTED	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY May 23, 2012
NAME (DI EACE DOINT)	DUONE AUTO	DED TITLE	
NAME (PLEASE PRINT) Sheila Wopsock	<b>PHONE NUM</b> 435 781-7024	BER TITLE Regulatory Analyst	
SIGNATURE N/A		<b>DATE</b> 5/23/2012	

Sundry Number: 27444 API Well Number: 43047520500000

	STATE OF UTAH				FORM 9
,	DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS, AND MI		ì	5.LEASE DES UT ST ML 2	IGNATION AND SERIAL NUMBER: 22934
SUNDR	Y NOTICES AND REPORTS	ON	WELLS	6. IF INDIAN,	ALLOTTEE OR TRIBE NAME:
	posals to drill new wells, significantly reenter plugged wells, or to drill horiz n for such proposals.			7.UNIT or CA	AGREEMENT NAME:
1. TYPE OF WELL Gas Well					<b>E and NUMBER:</b> 921-26B-HZ
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.			9. API NUMBE 430475205	
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18tl	h Street, Suite 600, Denver, CO, 802		<b>NE NUMBER:</b> 9 720 929-6	9. FIELD and 5NATUERAL B	POOL or WILDCAT: UTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0681 FNL 1512 FEL				COUNTY: UINTAH	
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 26 Township: 09.0S Range: 21.0E Me	ridian:	s	STATE: UTAH	
11. CHEC	K APPROPRIATE BOXES TO INDICA	ATE N	ATURE OF NOTICE, REPOR	T, OR OTHE	R DATA
TYPE OF SUBMISSION			TYPE OF ACTION		
	ACIDIZE		ALTER CASING	CASI	NG REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS		CHANGE TUBING	CHAN	NGE WELL NAME
	CHANGE WELL STATUS		COMMINGLE PRODUCING FORMATIONS	CON	/ERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	☐ F	RACTURE TREAT	□ NEW	CONSTRUCTION
	OPERATOR CHANGE	F	PLUG AND ABANDON	PLUG	BACK
SPUD REPORT	PRODUCTION START OR RESUME	☐ F	RECLAMATION OF WELL SITE	RECO	DMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	□ s	SIDETRACK TO REPAIR WELL	□ темя	PORARY ABANDON
	TUBING REPAIR		/ENT OR FLARE	☐ wati	ER DISPOSAL
DRILLING REPORT     Report Date:	WATER SHUTOFF		SI TA STATUS EXTENSION	☐ APD	EXTENSION
7/6/2012	WILDCAT WELL DETERMINATION		OTHER	OTHER:	i
				!-	
	COMPLETED OPERATIONS. Clearly show			Accounts Oil, G FOR F	epted by the h Division of as and Mining RECORD ONLY 09, 2012
NAME (PLEASE PRINT)	PHONE NUM	BER	TITLE		
Jaime Scharnowske	720 929-6304		Regulartory Analyst		
<b>SIGNATURE</b>   N/A			<b>DATE</b> 7/6/2012		

Sundry Number: 28380 API Well Number: 43047520500000

	STATE OF UTAH		FORM 9
ι	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	3	5.LEASE DESIGNATION AND SERIAL NUMBER: UT ST ML 22934
SUNDR	Y NOTICES AND REPORTS ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for pro current bottom-hole depth, r FOR PERMIT TO DRILL form	posals to drill new wells, significantly deel reenter plugged wells, or to drill horizontal n for such proposals.	pen existing wells below laterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: MAVERICK 921-26B-HZ
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047520500000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th	PHO n Street, Suite 600, Denver, CO, 80217 37	<b>DNE NUMBER:</b> 79 720 929-6	9. FIELD and POOL or WILDCAT: 5NIATUERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0681 FNL 1512 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NWNE Section: 2	IIP, RANGE, MERIDIAN: 26 Township: 09.0S Range: 21.0E Meridian:	S	STATE: UTAH
11. CHEC	CAPPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPOR	T, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	_ ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
SUBSEQUENT REPORT	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
Date of Work Completion:	L DEEPEN L	FRACTURE TREAT	☐ NEW CONSTRUCTION
		PLUG AND ABANDON	PLUG BACK
SPUD REPORT Date of Spud:	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
✓ DRILLING REPORT	L TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
Report Date: 8/2/2012	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
07272012	WILDCAT WELL DETERMINATION	OTHER	OTHER:
Well was c	COMPLETED OPERATIONS. Clearly show all peompleted, finishing well comple	etion report.	epths, volumes, etc.  Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY August 06, 2012
NAME (PLEASE PRINT) Cara Mahler	<b>PHONE NUMBER</b> 720 929-6029	TITLE Regulatory Analyst I	
SIGNATURE N/A		<b>DATE</b> 8/2/2012	

### STATE OF UTAH

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				TMEN	TOF NA	TURA	RESO					(hi	ghlight	REPO	3)	FORM 8 ERIAL NUMBER:
			10101	JII 0	, OIL,	<u> </u>		71114114						ML 22		
WEL	L COM	PLET	ION	OR F	RECO	MPL	ETIO	N RE	POR	TANE	LOG	6. 11	FINDIAN,	ALLOTTE	E OR TR	IBE NAME
1a. TYPE OF WELL	:	OIL WE	u <b>Z</b>	(	GAS WELL	]	DRY		ОТН	ER	· · · · · · · · · · · · · · · · · · ·	7. U	INIT or CA	AGREEM	IENT NAI	ME
b. TYPE OF WORK NEW WELL	(; HORIZ. LATS.	DE EN	EP-	F	RE- ENTRY	]	DIFF. RESVR.		ОТН	≣R				RICK		:6B-HZ
2. NAME OF OPERA		_ & GA	S ON:	SHOF	RE, L.P	·.			•				PI NUMB 43047	ER: <b>'5205</b> 0	)	
3. ADDRESS OF OF P.O.BOX 17		Cl	ry <b>DE</b>	NVER		STATE	со	ZIP <b>802</b>	217		NUMBER: (0) 929-6000			POOL, O		
4. LOCATION OF W AT SURFACE:	•		L 151	2 FEL	. S26,T	9S,R	21E						QTR/QTR MERIDIAI WNE		N, TOWN	SHIP, RANGE,
AT TOP PRODU		137?								•		40	COUNTY	_		13. STATE
AT TOTAL DEPT								BH	d b	1 HS	iM		JINTA	Н		UTAH
14. DATE SPUDDEI 2/21/2012		5. DATE T. 4/17/2	012		<u> </u>	/2012	2	<i>p</i>	BANDON	ED 🗌	READY TO PRODU	ICE 🚺	49	917 GI	_	3, RT, GL):
18. TOTAL DEPTH:	MD 8,6 TVD 4.5		1	9. PLUG	BACK T.D		8,600 4,585		20. IF 1	MULTIPLE CO	OMPLETIONS, HOV	/ MANY? *		TH BRIDG LUG SET:	SE MC	
22. TYPE ELECTRIC			CAL LOG	S RUN (	Submit cop			<del></del>	1	23.	· · · · · · · · · · · · · · · · · · ·					
PE/CNLD/A	I/GŘ-PP	C CALI	PERS	S-FMI-	-RCB/0	GRCC	:L			WAS DST	L CORED? RUN? NAL SURVEY?	NO NO	<b></b> ✓	YES   YES   YES	(Sub	mit analysis) mit report) mit copy)
24. CASING AND L	NER RECOR	D (Report a	li strings	set in w	ell)											
HOLE SIZE	SIZE/GRA	ADE	WEIGHT	(#/ft.)	TOP (	MD)	вотто	M (MD)		EMENTER PTH	CEMENT TYPE & NO. OF SACKS		RRY IE (BBL)	CEMEN	IT TOP *	AMOUNT PULLED
20"	14"	STL	36.7	7#	C	)	4	0			28					
12 1/4"	9 5/8"	J-55	36	#	0	1	2,6	62			600				0	
8 3/4"	7" F	P-110	26	#	0	١	5,0	)53			520				0	
6 1/8"	4 1/2" F	P-110	11.6	6#	4,1	26	8,5	90								
25. TUBING RECOR	L RD	<u> </u>									<u></u>	<u> </u>		<u> </u>		<u></u>
SIZE	<del></del>	SET (MD)	PACKE	R SET (I	MD)	SIZE		DEPTH	SET (MD)	PACKE	R SET (MD)	SIZE	T	DEPTH SE	T (MD)	PACKER SET (MD)
2 3/8"	4,3	311														
26. PRODUCING IN	TERVALS									27. PERFO	RATION RECORD					, ,
FORMATION	NAME	TOP (	MD)	BOTTO	OM (MD)	TOP	(TVD)	вотто	M (TVD)	INTERVA	L (Top/Bot - MD)	SIZE	NO. HO	LES	PERFO	RATION STATUS
(A) GREEN F	RIVER					4,7	720	4,7	56					Оре	en 🗌	Squeezed
(B)														Оре	en 🗌	Squeezed
(C)														Оре	en 🔲	Squeezed
(D)														Ope	en 🔲	Squeezed
28. ACID, FRACTU	RE, TREATMI	ENT, CEME	NT SQUE	EZE, ET	C.											
DEPTH	INTERVAL								AM	T DIVA TRIUC	YPE OF MATERIAL					
PLEASE SE	E ATTA	CHED	PUM	IP 48,	519 BI	BLS L	INEAF	R GEL	AND	CORSS	LINKED GE	L AND	2,052	,580 L	BS 10	0 MESH
			20/4	0 WH	ITE SA	ND A	ND 20	)/40 C	RC RE	SIN CC	DATED SAN	D.				
	,		16 S	TAGE	S											
29. ENCLOSED AT	TACHMENTS														30. WE	LL STATUS:
=	RICAL/MECH. RY NOTICE FO			CEMENT	VERIFICA	ATION	=	GEOLOGI CORE AN	IC REPOR ALYSIS		DST REPORT OTHER:	DIREC	CTIONAL		\ \{\\	PROD
											······································			<u>i</u>	(EU	EIVED

(CONTINUED ON BACK)

AUG 1 4 2012

#### 31. INITIAL PRODUCTION

#### INTERVAL A (As shown in Item #26)

DATE FIRST PR	ODUCED:	TEST DA			HOURS TESTED	);	TEST PRODUCTION	OIL BBL:	GAS MCF:	WATER -	- BBL:	PROD. METHOD:
5/21/2012	2	6/5/2	012		2	24	RATES: →	238	504	0		1
CHOKE SIZE:	TBG. PRESS	S. CSG. PR	ESS. API GR	AVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION	V OIL - BBL:	GAS - MCF:	WATER -	- BBL:	INTERVAL STATUS:
20/64	113	90:	2				RATES: →	238	504	0	1	PROD
					INTE	ERVAL B (As show	wn in item #26)					
DATE FIRST PR	ODUCED:	TEST DA	TE:		HOURS TESTED	):	TEST PRODUCTION RATES: →	OIL – BBL:	GAS - MCF:	WATER -	- BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS	S. CSG. PRI	ESS. API GR	AVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	N OIL - BBL:	GAS - MCF:	WATER -	- BBL:	INTERVAL STATUS:
					INTE	ERVAL C (As show	wn in item #26)					
DATE FIRST PR	ODUCED:	TEST DA	TE:		HOURS TESTED	):	TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER -	- BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS	S. CSG. PRI	ESS. API GR	AVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	N OIL - BBL:	GAS - MCF:	WATER -	- BBL;	INTERVAL STATUS:
					INTE	ERVAL D (As show	wn In Item #26)					
DATE FIRST PR	ODUCED:	TEST DA	TE:		HOURS TESTED	):	TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER -	- BBL;	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS	S. CSG. PRI	ESS. API GR	AVITY	BTU GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER -	- BBL:	INTERVAL STATUS:
32. DISPOSITIO	ON OF GAS (S	old, Used for F	uel, Vented, Etc	:.)		······································	***************************************					
33. SUMMARY	OF POROUS 2	ZONES (Include	e Aquifers):		····		Ţ	34. FORMATION	(Log) MARKERS:			
Show all importa tested, cushion u						tests, including de	pth interval					
Formation	on	Top (MD)	Bottom (MD)		Descript	ions, Contents, etc	·,		Name		(1	Top Measured Depth)
								GREEN RI BIRD'S NE MAHOGAN UTELAND	ST IY			1,518 1,719 2,202 4,700

35. ADDITIONAL REMARKS (include plugging procedure)

Attached is the chronological well history. An Openhole Packers Plus sliding sleeve liner was used for completions.

36. I hereby certify that the foregoing and attached information is complete and correct as determined f	rom all available records.
NAME (PLEASE PRINT) CARA MAHLER	TITLE REGULATORY ANALYST
SIGNATURE C. A.	DATE 8/7/2012

This report must be submitted within 30 days of

- completing or plugging a new well
- · drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests
- \* ITEM 20: Show the number of completions if production is measured separately from two or more formations.
- \*\* ITEM 24: Cement Top Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining

1594 West North Temple, Suite 1210

Box 145801

Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

## CONFIDENTIAL

## 28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC DEPTH INTERVAL

STAGE 1	8422-8228
STAGE 2	8228-7991
STAGE 3	7991-7796
STAGE 4	7796-7559
STAGE 5	7559-7364
STAGE 6	7364-7170
STAGE 7	7170-6976
STAGE 8	6976-6740
STAGE 9	6740-6546
STAGE 10	6546-6309
STAGE 11	6309-6114
STAGE 12	6114-5877
STAGE 13	5877-5679
STAGE 14	5679-5432
STAGE 15	5432-5229



+N/-S

0.00

+E/-W

0.00

Northing

14534026.53

Project: UTAH - UTM (feet), NAD27, Zone 12N Site: MAVERICK 921-26B-HZ

Well: MAVERICK 921-26B-HZ

Wellbore: OH

Longitude -109.514219

Latittude

40.012395

WELL DETAILS: MAVERICK 921-26B-HZ

GL 4917 & KB 14 @ 4931.00ft (ENSIGN 139)

Easting

2056454.91

Design: OH

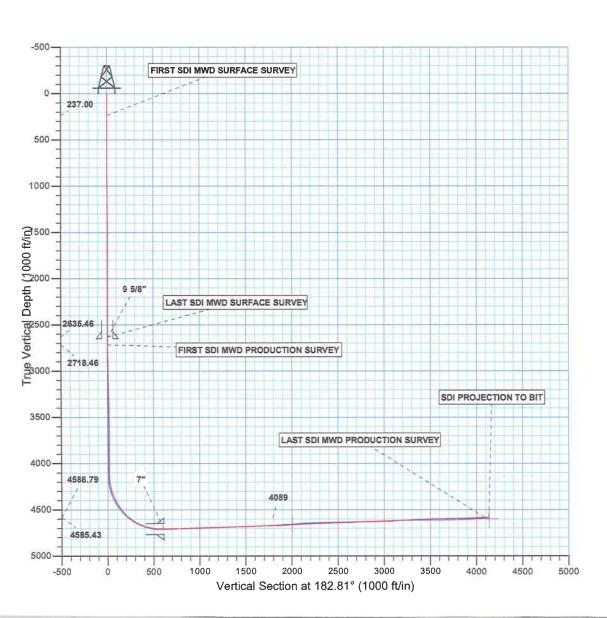
M

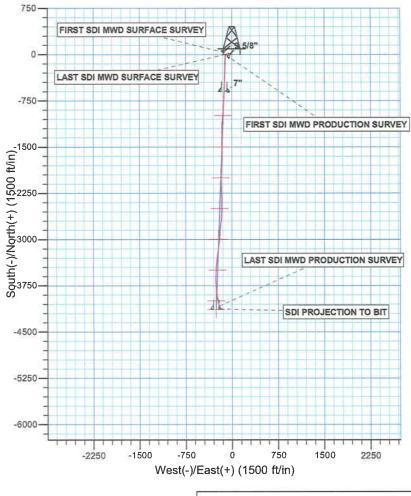
Azimuths to True North Magnetic North: 10.98°

Magnetic Field Strength: 52256.3snT Dip Angle: 65.86° Date: 03/27/2012 Model: IGRF2010



## CONFIDENTIAL





PROJECT DETAILS: UTAH - UTM (feet), NAD27, Zone 12N

Geodetic System: Universal Transverse Mercator (US Survey Feet) Datum; NAD 1927 (NADCON CONUS) Ellipsoid: Clarke 1866

Zone: Zone 12N (114 W to 108 W) Location: SECTION 26 T9S R21E System Datum: Mean Sea Level

Design: OH (MAVERICK 921-26B-HZ/OH)

Created By: Gabe Kendall Date: 16:46, July 02 2012



## CONFIDENTIAL

### **US ROCKIES REGION PLANNING**

UTAH - UTM (feet), NAD27, Zone 12N MAVERICK 921-26B-HZ MAVERICK 921-26B-HZ

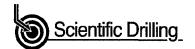
OH

Design: OH

## **Standard Survey Report**

02 July, 2012







Company:

**US ROCKIES REGION PLANNING** 

Project:

UTAH - UTM (feet), NAD27, Zone 12N

Site: Well: MAVERICK 921-26B-HZ

Wellbore:

MAVERICK 921-26B-HZ

OH OH Design:

Local Co-ordinate Reference:

Well MAVERICK 921-26B-HZ

TVD Reference:

GL 4917 & KB 14 @ 4931.00ft (ENSIGN 139) GL 4917 & KB 14 @ 4931.00ft (ENSIGN 139)

MD Reference:

True

North Reference:

**Survey Calculation Method:** Minimum Curvature

Database:

EDM 5000.1 Single User Db

Project

UTAH - UTM (feet), NAD27, Zone 12N

Map System: Geo Datum:

Universal Transverse Mercator (US Survey Feet)

NAD 1927 (NADCON CONUS) Zone 12N (114 W to 108 W)

Map Zone:

System Datum:

Mean Sea Level

Site

MAVERICK 921-26B-HZ, SECTION 26 T9S R21E

Site Position:

Northing:

14,534,026.54 usft

Latitude:

40.012395

From:

Lat/Long

Easting:

2,056,454.91 usft

Longitude:

-109.514219

**Position Uncertainty:** 

0.00 ft

Slot Radius:

13.200 in

**Grid Convergence:** 

0.96°

MAVERICK 921-26B-HZ, 614 FNL 1486 FEL

Well Position +N/-S

0.00 ft 0.00 ft +F/-W

Northing: Easting:

14.534.026.54 usft

Latitude:

40.012395

**Position Uncertainty** 

0.00 ft

Wellhead Elevation:

03/27/12

0.00

2,056,454.91 usft ft

10.98

Longitude: **Ground Level:** 

65.86

-109.514219 4,917.00 ft

Weilbore

Well

OH

Magnetics

Model Name

**IGRF2010** 

Sample Date

Declination (°)

Dip Angle (°)

**Field Strength** 

(nT)

OH

**Audit Notes:** 

Version:

Design

1.0

Phase:

**ACTUAL** 

Tie On Depth:

0.00

0.00

52.256

**Vertical Section:** 

Depth From (TVD)

+N/-S (ft)

0.00

+E/-W (ft)

Direction (°)

182.81

Survey Program

Date 07/02/12

From (ft)

To (ft)

Survey (Wellbore)

**Tool Name** 

Description

10.00 2,723.00 2,640.00 Survey #1 SDI MWD SURFACE (OH) 8,600.00 Survey #2 SDI MWD PRODUCTION (OH)

(ft)

SDI MWD SDI MWD SDI MWD - Standard ver 1.0.1 SDI MWD - Standard ver 1.0.1

Measured			Vertical			Vertical	Dogleg	Bulld	Turn
Depth (ft)	inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00
237.00	0.26	314.84	237.00	0.36	-0.37	-0.34	0.11	0.11	0.00
FIRST SDI N	IWD SURFACE S	SURVEY							
328.00	0.88	266.85	327.99	0.47	-1.21	-0.41	0.80	0.68	-52.74
418.00	1.23	276.78	417.98	0.55	-2.86	-0.41	0.44	0.39	11.03
512.00	2.64	278,27	511.92	0.98	-6.00	-0.68	1.50	1.50	1.59
605.00	4.04	274.49	604.76	1.54	-11.39	-0.98	1.52	1.51	-4.06
700.00	5.10	276.69	699.46	2.30	-18.92	-1.37	1.13	1.12	2.32
794.00	5.45	268.08	793.06	2.63	-27.53	-1.28	0.92	0.37	-9.16





Company:

US ROCKIES REGION PLANNING

Project:

UTAH - UTM (feet), NAD27, Zone 12N

Site: Well: MAVERICK 921-26B-HZ MAVERICK 921-26B-HZ

Wellbore: Design: ОН

Local Co-ordinate Reference:

TVD Reference:

North Reference:

GL 4917 8

Well MAVERICK 921-26B-HZ GL 4917 & KB 14 @ 4931.00ft (ENSIGN 139)

GL 4917 & KB 14 @ 4931.00ft (ENSIGN 139)

True Minimum Curvature

Survey Calculation Method:

Database:

EDM 5000.1 Single User Db

Survey

ОН	

Measured Depth (ft)	inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (*/100ft)	Build Rate (*/190ft)	Turn Rate (°/100ft)
888.00	6.07	265.62	886.59	2.10	-36.95	-0.29	0.71	0.66	-2.62
982.00	6.68	264.74	980.01	1.22	-47.35	1.10	0.66	0.65	-0.94
1,075.00	6.07	266.32	1,072.43	0.41	-57.64	2.41	0.68	-0.66	1.70
1,168.00	4.77	265.74	1,165.01	-0.19	-66.40	3.45	1.40	-1.40	-0.62
1,262.00	3.69	270.80	1,258.76	~0.44	-73,33	4.03	1.21	-1.15	5.38
1,356.00	4.34	265.86	1,352.53	-0.65	-79.90	4.57	0.78	0.69	-5.26
1,451.00	4.40	272.82	1,447.25	-0.73	-87,12	5,00	0.56	0.06	7.33
1,546.00	4.92	274.05	1,541.94	-0.27	-94.83	4.91	0.56	0.55	1.29
1,642.00	3.25	275.81	1,637.69	0.30	-101.64	4.68	1.74	-1.74	1,83
1,737.00	2.29	262,19	1,732.58	0.31	-106.20	4.89	1.22	-1.01	-14.34
1,833.00	1.32	243.73	1,828.53	-0.44	-109.09	5.78	1.17	-1.01	-19.23
1,926.00	0.53	148.63	1,921.52	-1.28	-109.83	6.66	1.58	-0.85	-102.26
2,020.00	0.26	91.86	2,015.52	-1.66	-109.39	7.02	0.47	-0.29	-60,39
2,115.00	1.14	90.28	2,110.51	-1.67	-108.23	6.97	0.93	0.93	-1.66
2,208.00	0.97	65.14	2,203.49	-1.34	-106.59	6.56	0.52	-0.18	-27.03
2,304.00	1.24	44.41	2,299.48	-0.26	-105.13	5.41	0.50	0.28	-21.59
2,399.00	0.35	38.68	2,394.47	0.70	-104.22	4.41	0.94	-0.94	-6.03
2,493.00	0.34	102.43	2,488.47	0.87	-103.77	4.22	0.39	-0.01	67.82
2,589.00	0.35	235.73	2,584.46	0.64	-103.74	4.44	0.66	0.01	138.85
2,640.00	0.62	232.44	2,635.46	0.38	-104.08	4.72	0.53	0.53	-6.45
	WD SURFACE S								
2,723.00	0.79	194.37	2,718.46	-0.44	-104.58	5.57	0.59	0.20	<b>-4</b> 5.87
FIRST SDI N	IWD PRODUCTI	ON SURVEY							
2,814.00	1.29	196.80	2,809.44	-2.03	-105.03	7.18	0.55	0.55	2.67
2,904.00	1.21	203.10	2,899.42	-3.88	-105.70	9.05	0.18	-0.09	7.00
2,995.00	1.43	185.69	2,990.40	-5.89	-106.19	11.09	0.50	0.24	-19.13
3,085.00	1.07	165.36	3,080.38	<i>-</i> 7.82	-106.09	13.01	0.63	-0.40	-22.59
3,176.00	1.03	169.76	3,171.36	-9.45	-105.73	14.62	0.10	-0.04	4.84
3,266.00	1.15	156.84	3,261.34	-11.07	-105.23	16.22	0.30	0.13	-14.36
3,357.00	0.47	213.67	3,352.34	-12.22	-105,08	17.36	1.07	-0.75	62.45
3,447.00	0.74	234.23	3,442.33	-12.87	-105.75	18.04	0.38	0.30	22.84
3,538.00	1.00	235.46	3,533.32	-13.66	-106,88	18.89	0.29	0.29	1.35
3,629.00	0.20	358.19	3,624.32	-13.96	-107.54	19.21	1.23	-0.88	134.87
3,719.00	0.33	326.64	3,714.31	-13.58	-107.69	18.84	0.21	0.14	-35.06
3,809.00	0.79	342.94	3,804.31	-12.77	-108.01	18.05	0.54	0.51	18.11
3,900.00	0.97	350.85	3,895.30	-11.41	-108.32	16.71	0.24	0.20	8.69
3,991.00	0.74	327.51	3,986.29	-10.16	-108.76	15.47	0.45	-0.25	-25.65
4,075.00	0.91	100.84	4,070.29	-9.82	-108.40	15.12	1.81	0.20	158.73
4,105.00	0.46	143.41	4,100.28	-9.97	-108.09	15.25	2.17	-1.50	141.90
4,135.00	1.79	196.69	4,130.28	-10.51	-108.15	15.80	5.20	4.43	177.60
4,165.00	5.00	192.78	4,160.22	-12.24	-108.58	17.54	10.72	10.70	-13.03
4,195.00	7.76	186.16	4,190.03	-15.52	-109.08	20.85	9.51	9.20	-22.07





Company:

US ROCKIES REGION PLANNING

Project:

UTAH - UTM (feet), NAD27, Zone 12N

Site: Well: MAVERICK 921-26B-HZ MAVERICK 921-26B-HZ

Wellbore: Design: ОН

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Database:

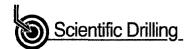
Well MAVERICK 921-26B-HZ

GL 4917 & KB 14 @ 4931.00ft (ENSIGN 139) GL 4917 & KB 14 @ 4931.00ft (ENSIGN 139)

True

Minimum Curvature

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth (ft)	inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)
4,256.00	11.87	189.00	4,250.20	-25.43	-110.28	30.80	9.58	9.40	10.30
4,286.00	14.91	187,98	4,279.38	-32.30	-111.30	37.71	10.16	10.13	-3.40
4,316.00	17.45	186.32	4,308.19	-40.59	-112.33	46.05	8.61	8.47	-5.53
4,346.00	20.63	183,89	4,336.54	-50.34	-113.19	55.82	10.92	10.60	-8.10
4,376.00	23.21	183.43	4,364.37	-61.51	-113.90	67.02	8.62	8.60	-1.53
4,407.00	26.47	182.59	4,392.50	-74.52	-114.58	80.04	10.58	10.52	-2.71
4,437.00	29.67	180.21	4,418.97	-88.62	-114.91	94.15	11.30	10.67	-7.93
4,467.00	32.18	178.80	4,444.70	-104.04	-114.77	109.54	8.71	8.37	-4.70
4,497.00	34.90	179.51	4,469.71	-120.61	-114.53	126.08	9.16	9.07	2.37
4,527.00	37.41	180.57	4,493.93	-138.31	-114.54	143.76	8.62	8.37	3.53
4,557.00	39.89	180.16	4,517.35	-157.04	-114.66	162.47	8.31	8.27	-1.37
4,588.00	43.00	180,46	4,540.59	-177.56	-114.77	182.97	10.05	10.03	0.97
4,618.00	45.48	180.45	4,562.08	-198.49	-114.94	203.88	8.27	8.27	-0.03
4,648.00	49.12	182.36	4,582.42	-220.52	-115.49	225.92	13.00	12.13	6.37
4,679.00	52.61	182.14	4,601.99	-244.54	-116.43	249.96	11.27	11.26	-0.71
4,709.00	56.37	181.83	4,619.41	-268.95	-117.28	274.37	12.56	12.53	-1.03
4,739.00	59.58	181.61	4,635.31	-294.37	-118.04	299.80	10.72	10.70	-0.73
4,769.00	62.71	182.59	4,649.79	-320.62	-119.01	326.07	10.82	10.43	3.27
4,799.00	66.20	182.12	4,662.72	-347.66	-120.12	353,13	11.72	11.63	-1.57
4,829.00	69.84	181.03	4,673.95	-375.46	-120.88	380.94	12.59	12.13	-3.63
4,859.00	73.21	180.73	4,683.46	-403.91	-121.32	409.37	11.27	11.23	-1.00
4,889.00	76.03	181.00	4,691.41	-432.83	-121.75	438.28	9.44	9.40	0.90
4,919.00	79.16	180.96	4,697.86	-462.12	-122.25	467.56	10.43	10.43	-0.13
4,950.00	81.95	181.49	4,702.94	-492.69	-122.91	498.12	9.16	9,00	1.71
4,980.00	84.72	181.32	4,706.43	-522.48	-123.64	527.91	9.25	9.23	-0.57
5,010.00	88.39	181.95	4,708.23	-552.40	-124.49	557.84	12.41	12.23	2.10
5,033.00	90.66	182.54	4,708.42	-575.38	-125.39	580.84	10.20	9.87	2.57
5,109.00	91.27	182.64	4,707.14	-651.30	-128.83	656.83	0.81	0.80	0.13
5,171.00	92.69	182.22	4,705.00	-713.20	-131.45	718.79	2.39	2.29	-0.68
5,261.00	91.07	182.45	4,702.04	-803.08	-135.12	808.73	1.82	-1.80	0.26
5,354.00	91.31	184.79	4,700.11	-895.86	-140.99	901.70	2.53	0.26	2.52
5,445.00	92.62	184.51	4,696.99	-986.51	-148.36	992.59	1.47	1.44	-0.31
5,537.00	91.61	182.51	4,693.60	-1,078.27	-153.99	1,084.52	2.43	-1.10	-2.17
5,624.00	91.45	183.12	4,691.27	-1,165.13	-158.26	1,171.49	0.72	-0.18	0.70
5,718.00	91.41	182.71	4,688.93	-1,258.98	-163.04	1,265.46	0.44	-0.04	-0.44
5,812.00	91.45	179.20	4,686.58	-1,352.92	-164.61	1,359.36	3.73	0.04	-3.73
5,904.00	91.36	179.99	4,684.32	-1,444.89	-163.96	1,451.19	0.86	-0.10	0.86
5,997.00	92.86	179.52	4,680.90	-1,537.83	-163.56	1,543.99	1.69	1.61	-0.51
6,091.00	92.07	180.70	4,676.86	-1,631.74	-163.74	1,637.80	1.51	-0.84	1.26
6,185.00	90.40	180.61	4,674.83	-1,725.70	-164.81	1,731.71	1.78	-1.78	-0.10
6,278.00	92.19	182.37	4,672.73	-1,818.64	-167.23	1,824.65	2.70	1.92	1.89
6,372.00	94.97	182.46	4,666.86	-1,912.37	-171.18	1,918.46	2.96	2.96	0.10
6,464.00	93.83	182.19	4,659.80	-2,004.02	-174.90	2,010.18	1.27	-1.24	-0.29





Company:

US ROCKIES REGION PLANNING

Project:

UTAH - UTM (feet), NAD27, Zone 12N

Site: Well: MAVERICK 921-26B-HZ MAVERICK 921-26B-HZ

Wellbore: Design: OH OH Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well MAVERICK 921-26B-HZ

GL 4917 & KB 14 @ 4931.00ft (ENSIGN 139)

GL 4917 & KB 14 @ 4931.00ft (ENSIGN 139)

True

Minimum Curvature

Measured Depth (ft)	inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,651.00	91.80	177.89	4,653.90	-2,190.81	-171.20	2,196.57	1.07	1.05	0.20
6,745.00	92.07	177.62	4,650.72	-2,284.69	-167.52	2,290.15	0.41	0.29	-0,29
6,840.00	91.89	178.50	4,647.44	-2,379.57	-164.30	2,384.77	0.94	-0.19	0.93
6,933.00	92.68	181.23	4,643.73	-2,472.49	-164.08	2,477.56	3.05	0.85	2.94
7,027.00	91,63	182.37	4,640.20	-2,566.37	-167.03	2,571.48	1.65	-1.12	1.21
7,121.00	91.98	185.00	4,637.24	-2,660.12	-173.07	2,665.41	2.82	0.37	2.80
7,214.00	93.39	188.26	4,632.88	-2,752.39	-183.79	2,758.09	3.82	1.52	3.51
7,308.00	91.89	184.21	4,628.55	-2,845.71	-193.99	2,851.80	4.59	-1.60	-4.31
7,402.00	91.45	182.81	4,625.81	-2,939.49	-199.74	2,945.75	1.56	-0.47	-1.49
7,494.00	91.98	186.94	4,623.05	-3,031.10	-207.55	3,037.63	4.52	0.58	4.49
7,588.00	92.02	187.77	4,619.77	-3,124.27	-219.58	3,131.27	0.88	0.04	0.88
7,682.00	92.73	188.48	4,615.88	-3,217.24	-232.85	3,224.79	1.07	0.76	0.76
7,776.00	92.59	187.11	4,611.51	-3,310.27	-245.59	3,318.33	1.46	-0.15	-1.46
7,869.00	93.47	184.48	4,606.60	-3,402,66	-254.96	3,411.06	2.98	0.95	-2.83
7,963.00	91.10	183.95	4,602.85	-3,496.32	-261.87	3,504.95	2.58	-2.52	-0.56
8,057.00	91,10	181.75	4,601.04	-3,590.18	-266.54	3,598.93	2.34	0.00	-2.34
8,151.00	91.89	178.78	4,598.59	-3,684.14	-266.97	3,692.79	3.27	0.84	-3.16
8,244.00	91.36	174.98	4,595.95	-3,776.94	-261.91	3,785.24	4.12	-0.57	-4.09
8,338.00	91.65	172.35	4,593.48	-3,870.33	-251.55	3,878.01	2.81	0.31	-2.80
8,432.00	91.98	169.89	4,590.51	-3,963.15	-237.05	3,970.00	2.64	0.35	-2.62
8,555,00	91.48	167.12	4,586.79	-4,083.61	-212.55	4,089.12	2.29	-0.41	-2.25
LAST SDI M	WD PRODUCTIO	N SURVEY							
8,600,00	91.98	167.12	4,585,43	-4,127,46	-202.52	4,132,43	1,11	1.11	0.00

Design Annotations  Measured	Vertical	Local Coon	50/1557000	
Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
237.00	237.00	0.36	-0.37	FIRST SDI MWD SURFACE SURVEY
2,640.00	2,635.46	0.38	-104.08	LAST SDI MWD SURFACE SURVEY
2,723.00	2,718.46	-0.44	-104.58	FIRST SDI MWD PRODUCTION SURVEY
8,555.00	4,586.79	-4,083.61	-212.55	LAST SDI MWD PRODUCTION SURVEY
8,600.00	4,585.43	-4,127.46	-202.52	SDI PROJECTION TO BIT

l		
Checked By:	Approved By:	Date:



### **US ROCKIES REGION PLANNING**

UTAH - UTM (feet), NAD27, Zone 12N MAVERICK 921-26B-HZ MAVERICK 921-26B-HZ

ОН

Design: OH

**Survey Report - Geographic** 

02 July, 2012





## SDI

#### Survey Report - Geographic



Company:

US ROCKIES REGION PLANNING

Project

UTAH - UTM (feet), NAD27, Zone 12N

Site:

MAVERICK 921-26B-HZ

Well:

MAVERICK 921-26B-HZ

Wellbore: Design:

ОН ОН Local Co-ordinate Reference:

TVD Reference: MD Reference:

Well MAVERICK 921-26B-HZ

GL 4917 & KB 14 @ 4931.00ft (ENSIGN 139)

GL 4917 & KB 14 @ 4931.00ft (ENSIGN 139)

North Reference:

True

**Survey Calculation Method:** 

Database:

Minimum Curvature

EDM 5000.1 Single User Db

Project

UTAH - UTM (feet), NAD27, Zone 12N

Map System:

Universal Transverse Mercator (US Survey Feet)

Geo Datum:

NAD 1927 (NADCON CONUS) Zone 12N (114 W to 108 W)

System Datum:

Mean Sea Level

Map Zone:

Site

MAVERICK 921-26B-HZ, SECTION 26 T9S R21E

Site Position: From:

Lat/Long

Northing: Easting:

14 534 026 54 usft 2,056,454.91 usft

Latitude: Longitude:

40.012395 -109,514219

**Position Uncertainty:** 

0.00 ft

Slot Radius:

13.200 in

Grid Convergence:

0.96

Well Well Position MAVERICK 921-26B-HZ, 614 FNL 1486 FEL

+N/-S +E/-W 0.00 ft 0.00 ft

Easting:

14,534,026.54 usft 2,056,454.91 usft

10.98

Latitude: Longitude:

40.012395 -109.514219

**Position Uncertainty** 

0.00 ft

Wellhead Elevation:

03/27/12

0.00

Ground Level:

4,917.00 ft

Wellbore

ОН

Magnetics

**Model Name** 

Sample Date

Declination (°)

Dip Angle (°)

Field Strength

182.81

(nT)

Design

**Audit Notes:** 

Version:

1.0

ОН

Phase:

ACTUAL

Tie On Depth:

65.86

0.00

Vertical Section:

Depth From (TVD) (ft)

IGRF2010

+N/-S (ft)

+E/-W (ft)

0.00

Direction (°)

52.256

Survey Program

07/02/12

From

To (ft)

Survey (Wellbore)

**Tool Name** 

0.00

Description

SDI MWD - Standard ver 1.0,1 SDI MWD - Standard ver 1,0,1

10.00 2,723.00 2,640.00 Survey #1 SDI MWD SURFACE (OH) 8,600.00 Survey #2 SDI MWD PRODUCTION (OH) SDI MWD SDI MWD

ırvey		row andwar		) )					
Measured Depth (ft)	inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0,00	0,00	0.00	0.00	14,534,026.54	2,056,454.91	40.012395	-109.51421
10.00	0.00	0.00	10.00	0.00	0.00	14,534,026.54	2,056,454.91	40.012395	-109.51421
237.00	0.26	314.84	237.00	0.36	-0.37	14,534,026.89	2,056,454.54	40.012396	-109.51422
FIRST S	DI MWD SURI	FACE SURVE	Υ						
328.00	0.88	266.85	327.99	0.47	-1.21	14,534,026.99	2,056,453.69	40.012396	-109.51422
418.00	1.23	276.78	417.98	0.55	-2.86	14,534,027.03	2,056,452.04	40.012397	-109.51422
512.00	2.64	278.27	511.92	0.98	-6.00	14,534,027.41	2,056,448.89	40.012398	-109.51424
605.00	4.04	274.49	604.76	1,54	-11.39	14,534,027.89	2,056,443.50	40.012399	-109.51426
700.00	5.10	276.69	699.46	2.30	-18.92	14,534,028.52	2,056,435.95	40.012401	-109.51428
794.00	5.45	268.08	793.06	2.63	-27.53	14,534,028.71	2,056,427.34	40.012402	-109.51431
888 00	6.07	265 62	886 59	2 10	-36.95	14 534 028 02	2 056 417 93	40 012401	-109 51435



## **SDI**Survey Report - Geographic



Company:

US ROCKIES REGION PLANNING

Project:

UTAH - UTM (feet), NAD27, Zone 12N

Site: Well: MAVERICK 921-26B-HZ MAVERICK 921-26B-HZ

Wellbore: Design: OH

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Database:

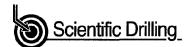
Well MAVERICK 921-26B-HZ

GL 4917 & KB 14 @ 4931.00ft (ENSIGN 139)

GL 4917 & KB 14 @ 4931.00ft (ENSIGN 139) True

Minimum Curvature

Measured			Vertical			Map	Map		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting		
<b>(ft)</b>	(°)	(°)	(ft)	( <b>ft</b> )	(ft)	(usft)	(usft)	Latitude	Longitude
982.00	6.68	264.74	980.01	1.22	-47.35	14,534,026.97	2,056,407.55	40.012398	-109.51438
1,075.00	6.07	266.32	1,072.43	0.41	-57.64	14,534,025.99	2,056,397.27	40.012396	-109.51442
1,168.00	4.77	265.74	1,165.01	-0.19	-66.40	14,534,025.24	2,056,388.52	40.012395	-109.51445
1,262.00	3.69	270.80	1,258.76	-0.44	-73.33	14,534,024.87	2,056,381.60	40.012394	-109.51448
1,356.00	4.34	265.86	1,352.53	-0.65	-79,90	14,534,024.55	2,056,375.03	40.012393	-109.51450
1,451.00	4.40	272.82	1,447.25	-0.73	-87.12	14,534,024.35	2,056,367.81	40.012393	-109.51453
1,546.00	4.92	274.05	1,541.94	-0.27	-94.83	14,534,024.69	2,056,360.10	40.012394	-109.51455
1,642.00	3.25	275.81	1,637.69	0.30	-101.64	14,534,025.14	2,056,353,28	40.012396	-109.51458
1,737.00	2.29	262.19	1,732.58	0.31	-106.20	14,534,025.08	2,056,348.72	40.012396	-109.51459
1,833.00	1.32	243.73	1,828.53	-0.44	-109.09	14,534,024.28	2,056,345.84	40.012394	-109.51460
1,926.00	0.53	148.63	1,921.52	-1.28	-109.83	14,534,023,43	2,056,345.12	40,012392	-109.51461
2,020.00	0.26	91.86	2,015.52	-1.66	-109.39	14,534,023.06	2,056,345.56	40.012391	-109.51461
2,115.00	1.14	90.28	2,110.51	-1.67	-108.23	14,534,023.06	2,056,346.72	40.012391	-109.51460
2,208.00	0.97	65.14	2,203.49	-1.34	-106.59	14,534,023.42	2,056,348.36	40.012391	-109.51460
2,304.00	1.24	44.41	2,299.48	-0.26	-105.13	14,534,024.53	2,056,349,80	40.012394	-109.51459
2,399.00	0.35	38.68	2,394.47	0.70	-104.22	14,534,025.50	2,056,350.69	40.012397	-109.5145
2,493.00	0.34	102.43	2,488.47	0.87	-103.77	14,534,025.67	2,056,351.14	40.012397	-109.5145
2,589.00	0.35	235.73	2,584.46	0.64	-103.74	14,534,025.45	2,056,351.18	40.012397	-109.5145
2,640.00	0.62	232.44	2,635.46	0.38	-104.08	14,534,025.18	2,056,350.83	40.012396	-109.51459
LAST SE	I MWD SURF	ACE SURVEY	1						
2,723.00	0.79	194.37	2,718.46	-0.44	-104.58	14,534,024.35	2,056,350.35	40.012394	-109.5145
FIRST S	DI MWD PROI	DUCTION SUI	RVEY						
2,814.00	1.29	196.80	2,809.44	-2,03	-105.03	14,534,022.75	2,056,349.92	40.012390	-109.5145
2,904.00	1.21	203.10	2,899.42	-3.88	-105.70	14,534,020.90	2,056,349.29	40.012384	-109.5145
2,995.00	1.43	185.69	2,990.40	-5.89	-106.19	14,534,018.88	2,056,348.83	40.012379	-109.5145
3,085.00	1.07	165.36	3,080.38	-7.82	-106.09	14,534,016.95	2,056,348.97	40.012374	-109.5145
3,176.00	1,03	169,76	3,171.36	-9.45	-105.73	14,534,015,33	2,056,349,35	40.012369	-109,5145
3,266.00	1.15	156.84	3,261.34	-11.07	-105.23	14,534,013.71	2,056,349.88	40.012365	-109.5145
3,357.00	0.47	213.67	3,352.34	-12.22	-105.08	14,534,012.56	2,056,350.05	40.012362	-109.5145
3,447.00	0.74	234.23	3,442.33	-12.87	-105.75	14,534,011.90	2,056,349.39	40.012360	-109.5145
3,538.00	1.00	235.46	3,533.32	-13.66	-106.88	14,534,011.09	2,056,348.27	40.012358	-109.5146
3,629.00	0.20	358.19	3,624.32	-13.96	-107.54	14,534,010.79	2,056,347.61	40.012357	-109.5146
3,719.00	0.33	326.64	3,714.31	-13.58	-107.69	14,534,011.16	2,056,347.46	40.012358	-109.5146
3,809.00	0.79	342.94	3,804.31	-12.77	-108.01	14,534,011.96	2,056,347.12	40.012360	-109,5146
3,900.00	0.97	350.85	3,895.30	-11.41	-108.32	14,534,013.32	2,056,346.79	40.012364	-109.5146
3,991.00	0.74	327.51	3,986.29	-10.16	-108.76	14,534,014.57	2,056,346.33	40.012367	-109.5146
4,075.00	0.91	100.84	4,070.29	-9.82	-108.40	14,534,014.91	2,056,346.69	40.012368	-109.5146
4,105.00	0.46	143.41	4,100.28	-9.97	-108.09	14,534,014.77	2,056,347.00	40.012368	-109.5146
4,135.00	1.79	196.69	4,130.28	-10.51	-108.15	14,534,014.22	2,056,346.95	40.012366	-109.5146
4,165.00	5.00	192.78	4,160.22	-12.24	-108.58	14,534,012.49	2,056,346.55	40.012362	-109.5146
4,195.00	7.76	186,16	4,190.03	-15.52	-109.08	14,534,009.19	2,056,346.10	40.012352	-109.5146
4,226.00	9.05	185.91	4,220.70	-20.03	-109.56	14,534,004.68	2,056,345.70	40.012340	-109.5146
4,256.00	11.87	189.00	4,250.20	-25.43	-110.28	14,533,999.27	2,056,345.06	40.012325	-109,5146
4,286.00	14,91	187.98	4,279.38	-32.30	-111.30	14,533,992.39	2,056,344.16	40.012306	-109.5146
4,316.00	17.45	186.32	4,308.19	-40.59	-112.33	14,533,984.08	2,056,343.27	40.012284	-109,5146
4,346.00	20.63	183.89	4,336.54	-50.34	-113.19	14,533,974.32	2,056,342.58	40.012257	-109.5146
4,376.00	23.21	183.43	4,364.37	-61.51	-113.90	14,533,963.13	2,056,342.05	40.012226	-109.5146
4,407.00	26.47	182.59	4,392.50	-74.52	-114.58	14,533,950.12	2,056,341.59	40.012191	-109.5146
4,437.00	29.67	180.21	4,418.97	-88.62	-114.91	14,533,936.01	2,056,341.49	40.012152	-109.5146
4,467.00	32.18	178.80	4,444.70	-104.04	-114.77	14,533,920.60	2,056,341.89	40.012109	-109.5146
4,497.00	34.90	179.51	4,469.71	-120.61	-114.53	14,533,904.03	2,056,342.41	40.012064	-109.5146
4,527.00	37.41	180.57	4,493.93	-138.31	-114.54	14,533,886.34	2,056,342.69	40.012015	-109.5146
4,557.00	39.89	180.16	4,517.35	-157.04	-114.66	14,533,867.60	2,056,342.88	40.011964	-109.5146
4,588.00		180.46	4,540.59	-177.56	-114.77	14,533,847.09	2,056,343.11	40.011908	-109.5146
4,618.00	45.48	180.45	4,562.08	-198.49	-114.94	14,533,826.16	2,056,343.29	40.011850	-109,5146



#### SDI Survey Report - Geographic



Company:

US ROCKIES REGION PLANNING

Project:

UTAH - UTM (feet), NAD27, Zone 12N

Site: Well: MAVERICK 921-26B-HZ MAVERICK 921-26B-HZ

Wellbore: Design:

ОН ОН Local Co-ordinate Reference:

Well MAVERICK 921-26B-HZ

TVD Reference: MD Reference:

GL 4917 & KB 14 @ 4931.00ft (ENSIGN 139) GL 4917 & KB 14 @ 4931.00ft (ENSIGN 139)

North Reference:

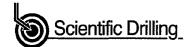
**Survey Calculation Method:** 

Database:

Minimum Curvature

True

Measured			Vertical			Map	Map		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting		
(ft)	(°)	(°)	(ft)	(批)	(ft)	(usft)	(usft)	Latitude	Longitude
4,648.00	49.12	182.36	4,582.42	-220.52	-115.49	14,533,804.12	2,056,343.11	40.011790	-109.51463
4,679.00	52.61	182.14	4,601.99	-244.54	-116.43	14,533,780.08	2,056,342.57	40.011724	-109.5146
4,709.00	56.37	181.83	4,619.41	-268.95	-117.28	14,533,755.67	2,056,342.13	40.011657	-109,5146
4,739.00	59.58	181.61	4,635.31	-294.37	-118.04	14,533,730.24	2,056,341.79	40.011587	-109.5146
4,769.00	62.71	182.59	4,649.79	-320.62	-119.01	14,533,703.98	2,056,341.26	40.011515	-109.5146
4,799.00	66,20	182.12	4,662.72	-347.66	-120.12	14,533,676.92	2,056,340.61	40.011441	-109.5146
4,829.00	69.84	181.03	4,673.95	-375.46	-120.88	14,533,649.11	2,056,340.31	40.011364	-109.5146
4,859.00	73.21	180.73	4,683.46	-403.91	-121.32	14,533,620.66	2,056,340.35	40.011286	-109.5146
4,889.00	76.03	181.00	4,691.41	-432.83	-121.75	14,533,591.74	2,056,340.39	40.011207	-109.5146
4,919.00	79.16	180.96	4,697.86	-462.12	-122.25	14,533,562.44	2,056,340.38	40,011126	-109,5146
4,950.00	81,95	181.49	4,702.94	-492.69	-122.91	14,533,531.86	2,056,340.23	40.011042	-109.5146
4,980.00		181.32	4,706,43	-522.48	-123.64	14,533,502.07	2,056,340.00	40.010961	-109.5146
5,010.00		181.95	4,708.23	-552.40	-124.49	14,533,472.13	2,056,339.65	40.010878	-109.51466
5,033.00		182.54	4,708.42	-575.38	-125.39	14,533,449.14	2,056,339.13	40.010815	-109.5146
5,109.00		182.64	4,707.14	-651.30	-128.83	14,533,373.18	2,056,336.96	40.010607	-109.5146
5,171.00		182,22	4,705.00	-713.20	-131.45	14,533,311.24	2,056,335,37	40.010437	-109,5146
5,261.00		182.45	4,702.04	-803.08	-135.12	14,533,221.32	2,056,333.20	40,010190	-109.5147
5,354.00		184.79	4,700.11	-895.86	-140.99	14,533,128.45	2,056,328.88	40.009935	-109.5147
5,445.00		184.51	4,696.99	-986.51	-148.36	14,533,037.69	2,056,323.02	40.009686	-109.5147
5,537.00		182.51	4,693.60	-1,078.27	-153.99	14,532,945.85	2,056,318.92	40.009435	-109.5147
5,624.00		183.12	4,691.27	-1,165.13	-158.26	14,532,858.93	2,056,316.10	40.009196	-109.5147
5,718.00		182,71	4,688.93	-1,103.13	-163.04	14,532,765.01	2,056,312.89	40.008938	-109.5148
5,812.00		179.20	4,686.58	-1,250.90	-164.61		2,056,312.89	40.008680	-109.5148
5,904.00		179.20	4,684.32	-1,352.92 -1,444.89	-163.96	14,532,671.06	2,056,315.07	40.008428	-109.5148
5,904.00		179.59	4,680.90	-1, <del>444</del> .89 -1,537.83	-163.56	14,532,579.11 14,532,486.20	2,056,317.02	40.008173	-109.5148
		180.70		-1,631.74	-163.74		2,056,318.40		
6,091.00			4,676.86			14,532,392,30		40,007915	-109,5148
6,185.00		180.61	4,674.83	-1,725.70	-164.81	14,532,298.33	2,056,318.90	40.007657	-109.5148
6,278.00		182.37	4,672.73	-1,818.64	-167,23	14,532,205.36	2,056,318.03	40.007402	-109.5148
6,372.00		182.46	4,666.86	-1,912.37	-171.18	14,532,111.59	2,056,315.64	40.007144	-109.5148
6,464.00		182.19	4,659.80	-2,004.02	-174.90	14,532,019.88	2,056,313.45	40.006893	-109.5148
6,557.00		177.70	4,656.04	-2,096.91	-174.81	14,531,927.01	2,056,315.09	40.006638	-109.5148
6,651.00		177.89	4,653.90	-2,190.81	-171.20	14,531,833.18	2,056,320.27	40.006380	-109.5148
6,745.00		177.62	4,650.72	-2,284.69	-167.52	14,531,739.38	2,056,325.52	40.006122	-109.5148
6,840.00		178.50	4,647.44	-2,379.57	-164.30	14,531,644.56	2,056,330.31	40.005862	-109.5148
6,933.00		181.23	4,643.73	-2,472.49	-164.08	14,531,551.66	2,056,332.08	40.005606	-109.5148
7,027.00		182.37	4,640.20	-2,566.37	-167.03	14,531,457.74	2,056,330.70	40.005349	-109.5148
7,121.00		185.00	4,637.24	-2,660.12	-173,07	14,531,363.90	2,056,326.22	40.005091	-109.5148
7,214.00		188.26	4,632.88	-2,752.39	-183.79	14,531,271.47	2,056,317.04	40.004838	-109.5148
7,308.00		184.21	4,628.55	-2,845 <i>.</i> 71	-193.99	14,531,177.99	2,056,308.40	40.004582	-109.5149
7,402.00	91.45	182.81	4,625.81	-2,939.49	-199.74	14,531,084.13	2,056,304.22	40.004324	-109.5149
7,494.00	91.98	186.94	4,623.05	-3,031 <i>.</i> 10	-207.55	14,530,992.41	2,056,297.93	40.004073	-109.5149
7,588.00	92.02	187.77	4,619.77	-3,124.27	-219.58	14,530,899.05	2,056,287.46	40.003817	-109.5150
7,682.00	92.73	188.48	4,615.88	-3,217.24	-232.85	14,530,805.87	2,056,275.74	40.003562	-109,5150
7,776.00	92,59	187.11	4,611.51	-3,310,27	-245.59	14,530,712.64	2,056,264.56	40.003306	-109.5150
7,869.00	93.47	184.48	4,606.60	-3,402.66	-254.96	14,530,620.11	2,056,256.72	40.003052	-109.5151
7,963.00	91.10	183.95	4,602.85	-3,496,32	-261.87	14,530,526.34	2,056,251.38	40.002795	-109.5151
8,057.00	91.10	181.75	4,601.04	-3,590.18	-266.54	14,530,432.42	2,056,248.28	40.002538	-109.5151
8,151.00		178.78	4,598.59	-3,684.14	-266.97	14,530,338.47	2,056,249.41	40.002280	-109.5151
8,244.00		174.98	4,595.95	-3,776.94	-261.91	14,530,245.76	2,056,256.01	40.002025	-109.5151
8,338.00		172.35	4,593.48	-3,870.33	-251.55	14,530,152.56	2,056,267.94	40.001768	-109.515
8,432.00		169.89	4,590.51	-3,963.15	-237.05	14,530,059.99	2,056,283.98	40.001514	-109.5150
8,555.00		167.12	4,586.79	-4,083.61	-212.55	14,529,939.95	2,056,310.49	40.001183	-109.5149
	DI MWD PROE			.,	_,	,020,000.00	_,,	.5.001100	100.0140
8,600.00		167.12	4,585.43	-4,127.46	-202.52	14,529,896.28	2,056,321.24	40.001062	-109.5149
•	SJECTION TO		1,500.40	4,121,70		1-1,020,000.20	2,000,021.27	70.00 1002	- 100,014



#### SDI

#### Survey Report - Geographic



Company:

US ROCKIES REGION PLANNING

Project:

UTAH - UTM (feet), NAD27, Zone 12N

Site: Well: MAVERICK 921-26B-HZ MAVERICK 921-26B-HZ

Wellbore: Design: OH OH Local Co-ordinate Reference:

Well MAVERICK 921-26B-HZ

TVD Reference:

GL 4917 & KB 14 @ 4931.00ft (ENSIGN 139)

MD Reference:

GL 4917 & KB 14 @ 4931.00ft (ENSIGN 139)

North Reference:

True

Survey Calculation Method:

Minimum Curvature

Database:

Design Annotations				anten 1900-1914 (KASA 1903) (1904-1904) anten anten 1904-1904. Antende alla 1904-1904 (KASA 1904-1904) anten a Bandan 1904-1904 (KASA 1904-1904) (KASA 1904-1904) antende antende antende antende antende alla 1904-1904 (KASA
Measured	Vertical	Local Coord	instes	
Depth	Depth	+N/-S	+E/-W	
(ft)	(他)	(ft)	(ft)	Comment
237.00	237.00	0.36	-0.37	FIRST SDI MWD SURFACE SURVEY
2,640.00	2,635.46	0.38	-104.08	LAST SDI MWD SURFACE SURVEY
2,723.00	2,718.46	-0.44	-104.58	FIRST SDI MWD PRODUCTION SURVEY
8,555.00	4,586.79	-4,083.61	-212.55	LAST SDI MWD PRODUCTION SURVEY
8,600.00	4,585.43	-4,127.46	-202.52	SDI PROJECTION TO BIT

Checked By:	Approved By:	Date:

#### **Operation Summary Report**

Well: MAVERICK 921-26B-HZ Spud Date: 2/23/2012

Project: UTAH-UINTAH Site: MAVERICK 921-26B-HZ PAD Rig Name No: ENSIGN 139/139, CAPSTAR 310/310

Event: DRILLING End Date: 4/21/2012 Start Date: 1/24/2012

ctive Datum: R evel)	KB @4,93	31.00usft (ab	ove Mean So	ea	UWI: N	W/NE/0/9	/S/21/E/26/0	0/0/26/PM/N/681/E/0/1512/0/0
Date	1 2 2 3 4 5 5 7	Time ert-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)
2/22/2012	15:00	- 18:00	3.00	DRLSUR	01	Α	Р	MOVE AIR PACKAGE AND PUMPS ON TO LOCATION. PIT WATER BEING DELIVERED
	18:00	- 0:00	6.00	DRLSUR	01	Α	P	RIG DOWN REMAINING EQUIP ON LOCATION NBU 1022- 9C2DS, WAIT ON TRUCKS
2/23/2012	0:00	- 6:00	6.00	DRLSUR	01	Α	Р	RIG DOWN REMAINING EQUIP ON LOCATION NBU 1022- 9C2DS, WAIT ON TRUCKS
	6:00	- 14:30	8.50	DRLSUR	01	С	Р	MOVE RIG TO MAVERICK 921-26B-HZ
	14:30	- 16:30	2.00	DRLSUR	01	В	Р	WELD ON ROT HEAD, RU BLOWIE LINE
	16:30	- 17:30	1.00	DRLSUR	01	В	P	SET UP RACKS, PUT BHA ON RACKS
	17:30	- 18:00	0.50	DRLSUR	01	В	Р	PU BHA
	18:00	- 21:30	3.50	DRLSUR	02	D	Р	DRILL TO 194'
	21:30	- 22:00	0.50	DRLSUR	05	С	Р	CIRC PRIOR TO TRIP
	22:00	- 22:30	0.50	DRLSUR	06	Α	Р	POOH FOR DIR TOOLS
	22:30	- 0:00	1.50	DRLSUR	02	D	P	PU DIR TOOLS, TIH DRILL FROM 194' TO 255'. WOB 22, RPM 45, ON OFF BTM 960/711, UP/DWN/ROT 53/43/48
2/24/2012	0:00	- 6:00	6.00	DRLSUR	02	D	Р	DRILL FROM 255' TO 750'. WOB 22, RPM 45
	6:00	- 6:30	0.50	DRLSUR	07	Α	P	SAFETY MEET, RIG SERVICE
	6:30	- 0:00	17.50	DRLSUR	02	D	P	DRILL FROM 750' TO 1920', WOB 22, RPM 45, UP/DWN/ROT 93/83/88, ON/OFF BTM 1200/890
2/25/2012	0:00	- 11:30	11.50	DRLSUR	02	D	Р	DRILL FROM 1920' TO 2690'. WOB 23, RPM 45, UP/DWN/ROT 120/96/107, ON/OFF BTM 1320/1050
	11:30	- 12:30	1.00	DRLSUR	05	С	Р	CIRC PRIOR TO TRIP
	12:30	- 17:30	5.00	DRLSUR	06	Α	Р	POOH, LD DRILL STRING AND DIR TOOLS
		- 18:00	0.50	DRLSUR	12	Α	P	X/O TO RUN 9.625" CASING, RIG UP AND MOVE CSG INTO POSTION TO PU
	18:00	- 0:00	6.00	DRLSUR	12	С	P	RUN 64 JTS 9 5/8, 28# CSNG. LAND CSNG @ 2230, SHOE SET @ 2656', BAFFLE SET @ 2613'
2/26/2012	0:00	- 4:00	4.00	DRLSUR	12	С	P	PRESSURE TEST LINES TO 2500 PSI. PUMP 20 BBLS OF WATER AHEAD. PUMP 20 BBLS OF 8.3# GEL WATER AHEAD. PUMP (250 SX) 170 BBLS OF 11.00# 3.82 YD 23 GAL/SK PREMIUM CEMENT. PUMP 200SX (41 BBLS) OF 15.8# 1.15 YD 5 GAL/SX PREMIUM CEMENT. DROP PLUG ON FLY. DISPLACE W/ 202 BBLS OF H20. FINAL LIFT OF 520 PSI AT 4 BBL/MIN. BUMP PLUG W/900 PSI HELD FOR 5 MIN. FLOAT DID HOLD. PUMP (150 SX) 30.7 BBLS OF SAME TAIL CEMENT W/ 4% CALC. DOWN BACKSIDE. CEMENT TO SUFACE
	4:00	- 6:00	2.00	DRLSUR	01	Ε	P	RIG DOWN, MOVE TO NBU 921-18M
4/1/2012	12:00	- 0:00	12.00	DRLPRO	01	E	P	R/D & GET READY F/ MOVE TO MAVERICK 26B - HZ - & WILL BE MOVEING W/ JONES TRUCKING THIS AM.
4/2/2012	0:00	- 6:00	6.00	DRLPRO	01	Е	P	R/D RIG GET READY FOR TRUCKS
	6:00	- 0:00	18,00	DRLPRO	01	A	<b>P</b> .	MOVE RIG W/ JONES TRUCKING TO MAVERICK 26B-HZ & HAD 5 HAUL TRUCK 3 BED TRUCKS & 2 FORKLIFTS TRUCKS OFF LOC. @ 15:30 & CONT TO R.U.R.T & RAISE DERRICK & 100% MOVED & 75% RIG UP

### **Operation Summary Report**

 Weil: MAVERICK 921-26B-HZ
 Spud Date: 2/23/2012

 Project: UTAH-UINTAH
 Site: MAVERICK 921-26B-HZ PAD
 Rig Name No: ENSIGN 139/139, CAPSTAR 310/310

 Event: DRILLING
 Start Date: 1/24/2012
 End Date: 4/21/2012

Active Datum: RKB @4,931.00usft (above Mean Sea

UWI: NW/NE/0/9/S/21/E/26/0/0/26/PM/N/681/E/0/1512/0/0

/el)	2 8 8 1 D 2		Stage of the late		e	172 or 100 c	Tara da la caractería		
Date	<ul> <li>CONTRACT</li> </ul>	ime	Duration	Phase	Code	Sub	P/U	MD From	Operation
4/0/0040	<del> </del>	rt-End	(hr)			Code		(usft)	
4/3/2012		- 12:00	12.00	MIRU	01	В	P		RIG UP ROTARY TOOLS,FLOW LINES, FLARE ,BACKYARD,FIX PLC
		- 13:30	1.50	MIRU	14	Α	Р		SET DOWN BOP ,HOOK UP HYDRALIC LINES,FUNCTION TEST
	13:30	- 15:00	1.50	MIRU	09	Α	P		CUT & SLIP DRLG LINE
		- 20:30	5,50	MIRU	15	A	P		TEST BOP,ANNULAR 2500,RAMS,CHOKELINE,KILLLINE,FLOOR VALVES,MANIFOLD 5K, CSG TO 1500 F/ 30 MIN
		- 22:00	1.50	MIRU	14	В	P		INSTALL WEARBUSHING, LOAD & STRAP BHA
		- 23:00	1.00	MIRU	23		Р		PRE SPUD SAFETY MEET WITH ALL PERSONEL ON LOCATION, PRE SPUD INSPECTION
	23:00	- 23:30	0.50	MIRU	80	В	Z		PICK UP MUD MTR FOR SURFACE TEST BEFORE INSTALLING BIT, RUPTURED KELLY HOSE AT 1300PSI WITH UPPER KELLY VALVE CLOSED,,DID NOT BLOW NAILS ON PUMPS SET AT 3500
	23:30	- 0:00	0.50	MIRU	08	В	Z		RIG DOWN BAD KELLY HOSE, WAIT ON NEW KELLY HOSE
4/4/2012	0:00	- 14:00	14.00	DRLPRO	08	Α	Z		REPAIR RIG C/O KELLY HOSE
		- 14:30	0.50	DRLPRO	23		Р		HELD S/M W/ ENSIGN DAYLIGHT CREW
		- 20:30	6.00	DRLPRO	06	Α	P		P/U MUD MOTOR & TEST MOTOR - P/U BIT-MOTOR-DIR TOOLS & BHA & D.P & TAG CEMENT @2605'
		- 21:30	1.00	DRLPRO	02	F	Р		DRILL CEMENT & FLOAT EQUIPMENT 2605' TO 2695'
4/5/2012	0:00	- 8:30	8.50	DRLPRO	02	D	P		SPUD NEW 8.75 HOLE DIR DRILL VERTICAL SECTION F/2695' TO 3084=389' AVG 155 WOB 12/18,RPM 50/170=220 STKS 120=609GPM,PSI 1200/1750 TORQ 4/7K,STWT UP 112 ROT 110 SO 106 SLIDE 4% 15' AVG 90 ROTATE 96% 374' AVG 155 SURVEY TOOL TO BIT 44',BIT TO KICK PAD 5.S5' NOV DEWATERING CONVENTIONAL W/ BOTH CENTRIFUGES 5-10' FLARE WITH PUMPS ON/NO FLOW STARTING 2950' LARGE TO MEDIUM SIZE CUTTINGS .HOLE IN GOOD CONDITION,BOP DRILL MORNING TOUR DIR DRILL VERTICAL SECTION F/3084 TO 4080 = 996 AVG @ 117.1 WOB 12/18,RPM 50/170=220 STKS 120=609GPM,PSI 1200/1750 TORQ 5/9K,STWT UP135 ROT 121 SO 125 SLIDE 1.5% 12' ROTATE 98.5% 98.5 NOV DEWATERING CONVENTIONAL W/ BOTH CENTRIFUGES
	8:30	- 10:00	1.50	DRLPRO	05	Α	P		SMALL TO MED SIZE CUTTINGS .HOLE IN GOOD CONDITION CIRC BTM UP TWICE
		- 14:30	4.50	DRLPRO	06	A	Р		T.O.H TO P/U CURVE BHA
		~ 16:00	1.50	DRLPRO	06	A	P		STAND BACK DIR TOOLS, CHANGE BIT & MUD MTR. SCRIBE DIR TOOLS
	16:00	- 18:00	2.00	DRLPRO	23		s		SHUT DOWN FOR HIGH WINDS

#### Operation Summary Report

Vell: MAVERIC	K 921-26	B-HZ						pud Date: 2/23/2012	
Project: UTAH-UINTAH Site: MAY						21-26B-H	Z PAD	Rig Name No: ENSIGN 139/139, CAPSTAR 310/310	
Event: DRILLING Start Date					e: 1/24/20	12		End Date: 4/21/2012	
Active Datum: RKB @4,931.00usft (above Mean Sea Level)			a	UWI: NW/NE/0/9/S/21/E/26/0/0/26/PM/N/681/E/0/1512/0/0					
Date		Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)	
	18:00	- 21:00	3.00	DRLPRO	08	Α	Z	REPAIR IRON DERRICK HAND ,PINCHED CONTROL CABLES	
	21:00	- 0:00	3.00	DRLPRO	06	Α	P	SAFETY MEET W/ CREW,TRIP IN HOLE W/ CURVE BHA,P/U 14 JTS DP 633',66 JTS 5" SHWDP 2041', 30 JTS 4.5 HWDP 920', 4 STNDS DP	
4/6/2012	0:00	- 3:30	3.50	DRLPRO	06	Α	Р	P/U CURVE BHA DIR TOOLS - 7 STANDS D.P - 66 JTS 5" H.W.D.P & 30 JTS 4.5 H.W.D.P & T.I.H	
	3:30	- 13:00	9.50	DRLPRO	02	D	P	DIR DRILL CURVE SECTION F/ 4080 TO 4360 = 280' AVG @ 29.4 WOB 12/18,RPM 50/170=220 STKS 130 = 637GPM,PSI 1500/1950 TORQ 5/9K,STWT UP 200 ROT 186 SO 182 SLIDE 147' - 52.5 ROTATE 133' -47.5% NOV DEWATERING CONVENTIONAL W/ BOTH CENTRIFUGES	
	13:00	- 13:30	0,50	DRLPRO	07	A	P	SMALL TO MED SIZE CUTTINGS .HOLE IN GOOD CONDITION SER RIG	
		- 0:00	10.50	DRLPRO	02	D	P	DIR DRILL CURVE SECTION F/ 4360 TO 4650=290 AVG @ 27 WOB 12/18,RPM 50/170=220 STKS 130 = 637GPM,PSI 1500/1950 TORQ 5/9K,STWT UP 202 ROT 191 SO 183 SLIDE 231 80% ROTATE 59' 20% 1.5' ABOVE & 1' RT OF PLAN NOV DEWATERING CONVENTIONAL W/ BOTH CENTRIFUGES	
								SMALL TO MED SIZE CUTTINGS .HOLE IN GOOD CONDITION	
4/7/2012	0:00	- 18:00 - 18:30	0.50	DRLPRO	02	D	P	DIR DRILL CURVE SECTION F/ 4650 TO 4994 =344 AVG 19 WOB 12/18,RPM 50/170=220 STKS 130 = 637GPM,PSI 1800/2300 TORQ 5/9K,STWT UP 206 ROT 191 SO 178 SLIDE 279 80% ROTATE 65' 20 % 1.5 ABOVE & .2 RT OF PLAN RAISE MUD WT TO 9.5 NOV DEWATERING CONVENTIONAL W/ BOTH CENTRIFUGES/THEN BYPASS TO BRING WT UP SMALL TO MED SIZE CUTTINGS .HOLE IN GOOD CONDITION RIG SERVICE	

							CKIES RI						
					Opera	ation	Summa	ry Report					
Well: MAVERICK 921-26B-HZ								Spud Date: 2/23/2012					
Project: UTAH-UINTAH Site: MA\ Event: DRILLING Start Dat					VERICK 9	921-26B-	HZ PAD	Rig Name No: ENSIGN 139/139, CAPSTAR 310/310					
								End Date: 4/21/2012					
Active Datum: RKB @4,931.00usft (above Mean Sea Level)						UWI: NW/NE/0/9/S/21/E/26/0/0/26/PM/N/681/E/0/1512/0/0							
Date		Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)					
	18:30	- 0:00	5.50	DRLPRO	02	D		DIR DRILL CURVE SECTION F/4994 TO CURVE TD@ 5077' =83 AVG WOB 12/18,RPM 50/170=220 STKS 120 = 590GPM,PSI 2000/2400 TORQ FINAL 8800 ROTATING, STWT UP 215 ROT 195 SO 180 SLIDE 70' 80 % ROTATE 13 20 % 4 ABOVE & 1' LEFT OF PLAN OF PLAN MUD WT TO 9.5 NOV BYPASSED TO BRING WT UP					
4/8/2012	0:00	- 2:00	2.00	DRLPRO	05	С	P	SMALL TO MED SIZE CUTTINGS .HOLE IN GOOD CONDITION CIRC & PUMP 11.5 WEIGHTED SWEEPS,RAISE MUD					
	2:00	- 4:00	2.00	DRLPRO	06	E	P	WT TO 10.2 WIPER TRIP BACK TO KOP, TIGHT SPOT @4693, TIH GOOD					
	4:00	- 5:00	1.00	DRLPRO	05	С	Р	CIRC 2- BTMS UP ,HOLE IN GOOD CONDITION ,BTMS UP GAS 131 NO/FLARE					
	5:00	- 18:30	13.50	DRLPRO	06	Α	P	POOH TO KOP,RIG UP AND L.D.D.P & BHA & PULL WEAR BUSHING					
	18:30	- 0:00	5.50	DRLPRO	12	С	P	HELD S/M & R/U TESCO CASING CREW & 116 JTS - P110 26# 7"PLUS SHOE & F/C & SET @ 5053					
4/9/2012	0:00	- 12:30	12.50	DRLPRÓ	12	С	Р	RUN 116 JTS 7" -26# CASING & WASH TIGHT SPOT @ 4693 TO 4720 & CONT R.I.H & LAND HANGER W/ 125K					
	12:30	- 13:30	1.00	DRLPRO	05	D	Р	CIRC BOTTOM UP					
		- 14:30	1.00	DRLPRO	12	E	P	HELD S/M & R/U CEMENT HEAD & TEST LINES & CEMENT W/ 10 BBLS WATER - 25 BBLS OF WIEGHT PILL 10.7 & GOT 3 BBLS CEMENT INTO PIPE & CEMENT TRUCK HYD SYSTEM BROKE DOWN.					
		- 18:00	3.50	DRLPRO	22	L	Z	RIG UP & CIRC CEMENT OUT W/ RIG PUMPS & WAITED ON CEMENT TRUCK					
	18:00	- 21:00	3.00	DRLPRO	12	E	P	HELD S/M & CEMENT W/ 10 BBLS WATER & 25 BBLS WEIGHT PILL @ 10.7 & 350 SKS LEAD,170 SX TAIL #14.3,DISPLACE 190 BBLS WATER,FINALLIFT 1450PSI,BUMPPLUG 500 OVER & HOLD 5 MIN,2-BBL LEAD TO PIT,1BBL TO INVENTORY,FLOATS HELD,RIG DOWN CEMENTERS					
	21:00	- 22:00	1.00	DRLPRO	14	В	Р	FLUSH BOP, LAYDOWN LANDING JT, SET DRILL THRU HEAD ON 7" CSG, INSTALL RETAINERS					
	22:00	~ 0:00	2.00	DRLPRO	13	Α	P	CHANGE PUMP LINERS AND PIPE RAMS-WHILE WAIT ON CEMENT					
4/10/2012	0:00	- 4:00	4.00	DRLPRO	13	Α	Р	WAIT ON CEMENT, CHANGE LINERS & PIPE RAMS					
	4:00	- 7:00	3.00	DRLPRO	15	Α	₽	TEST 4" RAMS TO 5K & TEST CASING @ 4500 PSI.					
	7:00	- 8:30	1.50	DRLPRO	06	Α	P	C.O SAVER SUB 4" FH & LOAD & STRAP BOTTOM HOLE ASSEMBLY & DRILL PIPE					
	8:30	- 19:00	10.50	DRLPRO	06	Α	Р	P/U BIT - MOTOR - DIR TOOLS - BOTTOM HOLE ASSEMBLY & DRILL PIPE & TAG CEMENT @ 4970'					
	19:00	- 19:30	0.50	DRLPRO	23		P	HELD S/M WITH ENSIGN CREW - ON WELL OPERATION DETAILS					

7/6/2012 11:15:48AM

Well: MAVERIC	K 921-26B-HZ						Spud Date: 2/2	23/2012	
Project: UTAH-l	Site: MA	/ERICK 9	21-26B-H	IZ PAD		Rig Name No: ENSIGN 139/139, CAPSTAR 310/310			
Event: DRILLIN	Start Date	e: 1/24/20	112			End Date: 4/21/2012			
octive Datum: R .evel)	KB @4,931.00usft (a	ea	UWI: NW/NE/0/9/S/21/E/26/0/0/26/PM/N/681/E/0/1512/0/0						
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation	
	19:30 - 23:30	4.00	DRLPRO	22	0	Z		CHANGE SAVOR SUB,ADD X/O SUB TO TRY CLEAR 4.5" UPSET ON SHWDP WITH ELEVATORS TO MAKE CONN,THEN GRABBER BOX OUT OF RANGE,,SWITCH BACK TO ORIGINAL SAVORSUB & DRILL WITH 4"DP AS PER DRILLING ENG	
444,0040	23:30 - 0:00	0.50	DRLPRO	02	F	P		DRILL CEMENT & SHOE TRACK F/4970 TO 5077' AT 3AM 4/11/2012	
4/11/2012	0:00 - 3:00	3.00	DRLPRO	02	F	Р		FINISH DRILL SHOE TRACK	
	9:00 - 10:00	1.00	DRLPRO	02	D	P		DIR DRILL HORIZONTAL 6.125 HOLE FROM 5077 TO 5275 = 198' AVG 33.0  WOB 12,RPM 70/174=244  STKS 60 = 300GPM,PSI 820/1120  TORQ 3/5 ROTATING,  STWT UP 135 ROT 128 SO 110  SLIDE 14' @ 7.5 %  ROTATE 184' @ 92.5 %  3.5' HIGH ON PLAN  MUD WT TO 8.5 VIS 38  NOV RUNNING CONVENTIONAL  SMALL TO MED SIZE CUTTINGS  .HOLE IN GOOD CONDITION  TRIP OUT HOLE F/ 5275 TO 4841 ( L/D 11 JTS OF 4"	
	10:00 - 11:00	4.00	DDI BĐÁ	00		<b>D</b>		DRILL PIPE.	
	11:00 - 16:00	1.00	DRLPRO DRLPRO	06 02	A D	P		P/U 11 JTS OF H.W.D.P TO REPLACED DRILL PIPE DIR DRILL HORIZONTAL 6.125 HOLE FROM 5275 TO 5486 = 211 AVG 42 WOB 12,RPM 70/174=244 STKS 60 = 300GPM,PSI 820/1120 TORQ 3/5 ROTATING, STWT UP 140 ROT 130 SO 117 SLIDE 14' @ 7.5 % ROTATE 197' 92% 2 HIGH & 8' LEFT OF PLAN MUD WT TO 8.6/37 NOV RUNNING CONVENTIONAL SMALL TO MED SIZE CUTTINGS .HOLE IN GOOD CONDITION	
	16:30 - 16:30 16:30 - 21:00	0.50 4.50	DRLPRO DRLPRO	07 02	A D	P P		RIG SERVICE  DIR DRILL HORIZONTAL 6.125 HOLE FROM 5486 TO 5578 = 92 AVG 20.4  WOB 12,RPM 70/174=244  STKS 60 = 300GPM,PSI 820/1120  TORQ 3/5 ROTATING,  STWT UP 143 ROT 132 SO 117  SLIDE 26' 28%  ROTATE 66' 72 %  2.13 HIGH & 8.53 RIGHT OF PLAN	

MUD WT TO 8.6/37

NOV RUNNING CONVENTIONAL SMALL TO MED SIZE CUTTINGS .HOLE IN GOOD CONDITION

**CIRC & CLEAN CUTTING BEDS** 

7/6/2012 11:15:48AM

21:00 - 21:30

0.50

DRLPRO

05

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#### **Operation Summary Report**

Well: MAVERIC	K 921-26B-HZ						Spud Date: 2/23/2012		
Project: UTAH-l	JINTAH		Site: MA	ÆRICK 9	21-26B-H	IZ PAD	Rig Name No: ENSIGN 139/139, CAPSTAR 310/310		
Event: DRILLIN	G		Start Date	e: 1/24/20	12		End Date: 4/21/2012		
Active Datum: R ₋evel)	KB @4,931.00usft (	ea	UWI: NW/NE/0/9/S/21/E/26/0/0/26/PM/N/681/E/0/1512/0/0						
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)		
	21:30 - 23:00	1.50	DRLPRO	02	D	P	DIR DRILL HORIZONTAL 6.125 HOLE FROM 5578 TO 5609 = 31' AVG 20.6 WOB 12,RPM 70/174=244 STKS 60 = 300GPM,PSI 820/1120 TORQ 3/5 ROTATING, STWT UP 143 ROT 132 SO 117 SLIDE 9' 10% ROTATE 83' 90 % 1.8 HIGH & 9.6 RIGHT OF PLAN MUD WT TO 8.6/37 NOV RUNNING CONVENTIONAL SMALL TO MED SIZE CUTTINGS .HOLE IN GOOD CONDITION		
	23:00 - 0:00	1.00	DRLPRO	06	Α	P	TRIP TO CHANGE B.H.A		
4/12/2012	0:00 - 6:00	6.00	DRLPRO	06	A	S	TRIP OUT OF HOLE, STRAIGHT PULL 20/3OK OVER TO SHOE@ 5067', PUMP DRY JOB ,PULL OUT STAND BACK DIR TOOLS & L/D MUD MOTOR & BIT		
	6:00 - 14:30	8.50	DRLPRO	22	L	Z	P/U NEW MOTOR & BIT & MUD HAD BAD BOX ON BIT END & L/D MOTOR & P/U SECOND MUD MOTOR WAS ALSO BAD COULD TURN MOTOR BY HAND L/D MOTOR & ( WAIT ON MUD MOTORS FROM GRAND JUCTION ) FROM SDI YARD. @ 06:00 TO 14:30		
	14:30 - 21:30	7.00	DRLPRO	06		Р	P/U NEW MOTOR & BIT & DIR TOOLS & T.I.H, BREAK CIRC 2600 & 4745',10' FILL ,5' FLARE F/20 MIN		
4/13/2012	21:30 - 0:00 0:00 - 1:30	2.50	DRLPRO	02	D	P	DIR DRILL HORIZONTAL 6.125 HOLE FROM 5609 TO 5640 =31 AVG 12 WOB 4/6,RPM 70/174=244 STKS 65 = 270 GPM,PSI 1250/1550 TORQ 3/6 ROTATING, STWT 140 UP 130 ROT 118 SO SLIDE 75 % ROTATE 15'% 1.7' HIGH & 9' RIGHT OF PLAN MUD WT TO 8.6/37 NOV RUNNING CONVENTIONAL SMALL TO MED SIZE CUTTINGS .HOLE IN GOOD CONDITION MUD MOTOR SPIKING @300DIFF 4/10 BIT WT DIR DRILL HORIZONTAL 6.125 HOLE FROM F/5640		
							TO 5665 = 25 AVG 16 WOB 4/6,RPM 70/174=244 STKS 65 = 270 GPM,PSI 1250/1550 TORQ 3/6 ROTATING, STWT 140 UP 130 ROT 118 SO SLIDE 80 % ROTATE 20 '% 1.7' HIGH & 9' RIGHT OF PLAN MUD WT TO 8.6/37 NOV RUNNING CONVENTIONAL SMALL TO MED SIZE CUTTINGS .HOLE IN GOOD CONDITION		
	1:30 - 7:00	5.50	DRLPRO				MUD MTR SPIKING@ 300 DIFF		

					Opera	tion S	umma	ary Report
Well: MAVERIC	C 921-26	B-HZ		<b></b>				Spud Date: 2/23/2012
Project: UTAH-L	INTAH			Site: MAV	ERICK 9	21-26B-H	IZ PAD	Rig Name No: ENSIGN 139/139, CAPSTAR 310/310
Event: DRILLING	}			Start Date	e: 1/24/20	12		End Date: 4/21/2012
Active Datum: R Level)	KB @4,9	31.00usft (a	bove Mean S	ea	UWI: NV	<b>V/NE</b> /0/9/	/S/21/E/2	6/0/0/26/PM/N/681/E/0/1512/0/0
Date	N 60 250 1 20	Time tart-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)
	7:00	- 12:30	5.50	DRLPRO	06	Α	Z	C/O MOTOR & BIT & T.I.H & WASH 85' BTM ( NO FILL )
		- 20:00	7.50	DRLPRO	02	D	P	DIR DRILL HORIZONTAL 6.125 HOLE FROM F/ 5665 TO 5951 = 286 AVG 38 WOB 8/18,RPM 70/78 = 148 STKS 72 = 301 GPM,PSI 1350/1558 DIFF 300 TORQ 3/6 ROTATING, STWT 150 UP 135 ROT 118 SO SLIDE 56' 19 % ROTATE 230 81% .05' HIGH & 4.4" RIGHT OF PLAN MUD WT TO 8.6/37 NOV RUNNING CONVENTIONAL SMALL TO MED SIZE CUTTINGS .HOLE IN GOOD CONDITION
	20:00	- 20:30	0.50	DRLPRO	07	Α	Р	RIG SERVICE
		- 0:00	3.50	DRLPRO				DIR DRILL HORIZONTAL 6.125 HOLE FROM F/5951 TO 6110 =159 AVG 45 WOB 17 ,RPM 70/78 = 148 STKS 72 = 301 GPM,PSI 1350/1558 DIFF 250 TORQ 5/9K ROTATING, STWT 150 UP 135 ROT 118 SO SLIDE 25' 15 % ROTATE 134' 85% .86 LOW & .53 LEFT OF PLAN MUD WT TO 8.6/37 NOV RUNNING CONVENTIONAL SMALL TO MED SIZE CUTTINGS .HOLE IN GOOD CONDITION
4/14/2012		- 13:00 - 13:30	0,50	DRLPRO	02	D	P	DIR DRILL HORIZONTAL 6.125 HOLE FROM F/6110 TO 6603 = 493 AVG 37.9 WOB 18 ,RPM 70/78 = 148 STKS 72 = 301 GPM,PSI 1350/1558 DIFF 300 TORQ 5/9K ROTATING, STWT UP 150 ROT 135 SO 118 SLIDE 53' @ 9.3% ROTATE 440 @ 90.7% 4.63 LOW & 5.9 LEFT OF PLAN MUD WT TO 8.6/36 TORQ OFF BOTTOM 4800 NOV RUNNING CONVENTIONAL SMALL SIZE CUTTING .HOLE IN GOOD CONDITION SERVICE RIG
		- 20:00	6.50			A	P	
	10.00	- 20,00	00,0	DRLPRO	06	A	٣	T.O.H FOR CHANGE BHA - 20/25K OVER STRING WT 135K,TIGHT SPOT 5750'
	20:00	- 0:00	4.00	DRLPRO	06	A	Р	CHANGE BIT & MUD MTR, SCRIBE DIR TOOLS, TRIP IN HOLE, WITH BHA & 45 STNDS DP 4192', & 22 STNDS SHWDP 2032', & DP TO TDCIRC 280' & 4900'
4/15/2012	0:00	- 3:00	3.00	DRLPRO	06	A	P	TRIP IN HOLE WITH NEW BIT & .58 RPG MTR, WASH 90' TO BOTTOM,NO FILL,5'FLARE BOTTOMDS UP,PASON GAS TRIP 4938 BACKGROUND 45 CONN

7/6/2012 11:15:48AM 7

## Operation Summary Report

Well: MAVERIC	K 921-26B-F	IZ						Spud Date: 2/23/	2012		
Project: UTAH-	UINTAH			Site: MA	ÆRICK 9	21-26B-H	Z PAD		Rig Name No: ENSIGN 139/139, CAPSTAR 310/310		
Event: DRILLIN	IG			Start Date	e: 1/24/20	12	End Date: 4/21/2012				
Active Datum: F Level)	RKB @4,931.	00usft (ab	oove Mean S	ea	UWI: NV	<b>V/NE</b> /0/9/	S/21/E/26/0	)/0/26/PM/N/681/	681/E/0/1512/0/0		
Date	Tin Start-		Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation		
	3:00 -	16:00	13.00	DRLPRO	02	D	P		DIR DRILL HORIZONTAL 6.125 HOLE FROM F /6603 TO 7166 = 563 AVG @ 43.3 WOB 4/8 ,RPM 70/174 = 244 STKS 72 = 301 GPM,PSI 1600/1900 DIFF 250 TORQ 5K STWT UP 145 ROT 115 SO 100 SLIDE 167 @ 30 % ROTATE 396 @ 70 % 2' LOW & 8 LEFT OF PLAN MUD WT TO 8.7/37 NOV RUNNING CONVENTIONAL SMALL TO MEDIUM SIZE CUTTING		
	16:00 -	16:30	0.50	DRLPRO	07	Α	P		.HOLE IN GOOD CONDITION SER RIG		
	16:30 -		7.50	DRLPRO	02	D	P		DIR DRILL HORIZONTAL 6.125 HOLE FROM F/ 7166 TO 7560 = 394 AVG 52/HR WOB 4/8 ,RPM 70/174 = 244 STKS 72 = 301 GPM,PSI 1800/2050 DIFF 250 TORQ 4800 STWT UP 145 ROT 116 SO 100 SLIDE 94' @ 24% ROTATE 291 @ 76% .5 HIGH & 12' LEFT OF PLAN MUD WT TO 8.7/37 NOV RUNNING CONVENTIONAL SMALL TO MEDIUM SIZE CUTTING .HOLE IN GOOD CONDITION		
4/16/2012	0:00 -	15:00	15.00	DRLPRO	02	D	P		DIR DRILL HORIZONTAL 6.125 HOLE FROM F/ 7560 TO 8134 = 547 AVG 38.2 '/HR WOB ,RPM 70/174 = 244 STKS 72 = 301 GPM,PSI 1700/2050 DIFF 250 TORQ 4800 STWT UP 145 ROT 116 SO 100 SLIDE 143' @ 24% ROTATE 404 @ 76% 11.3 HIGH & 25.0 RIGHT OF PLAN MUD WT TO 8.8/37 NOV RUNNING CONVENTIONAL SMALL TO MEDIUM SIZE CUTTING .HOLE IN GOOD CONDITION		
	15:00 -	15:30	0.50	DRLPRO	07	Α	Р		SERVICE RIG		
	15:30 -	0:00	8,50	DRLPRO	02	D			DIR DRILL HORIZONTAL 6.125 HOLE FROM F/8134 TO 8484=350 AVG 41 '/HR WOB 6/9 ,RPM 70/174 =244 STKS 72 = 301 GPM,PSI 1900/2250 DIFF 350 TORQ 8200DRILLING,OFF BOTTOM 5200 STWT 162 UP- ROT 112 SO 84 SLIDE 91 ' @26 % ROTATE 259 @74 % 12' HIGH & 29 LEFT OF PLAN MUD WT TO 8.8/37 NOV RUNNING CONVENTIONAL SMALL SIZE CUTTING .HOLE IN GOOD CONDITION		

7/6/2012

11:15:48AM

### Operation Summary Report

Well: MAVERIC	K 921-26B-HZ				ng garaga iy	A 42 43. 12,500s	Spud Date: 2/23/2012
Project: UTAH-L		***************************************	Site: MA\	/ERICK 9	21-26B-H	IZ PAD	Rig Name No: ENSIGN 139/139, CAPSTAR 310/310
Event: DRILLING	<b>G</b>	· .	Start Date	e· 1/24/20	112		End Date: 4/21/2012
Active Datum: R	KB @4,931.00usft (a	bove Mean S				/S/21/E/26	/0/0/26/PM/N/681/E/0/1512/0/0
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)
4/17/2012	2:00 - 2:30 2:30 - 3:00	2.00 0.50 0.50	DRLPRO DRLPRO	02 08 02	D D	Z P	DIR DRILL HORIZONTAL 6.125 HOLE FROM F/8484 TO 8571'=87 AVG 43 '/HR WOB 6/9 ,RPM 70/174 = 244 STKS 72 = 301 GPM,PSI 1900/2250 DIFF 350 TORQ 8200DRILLING,OFF BOTTOM 5200 STWT 162 UP- ROT 112 SO 84 SLIDE 20 ' @24 % ROTATE 67 @76 % 12HIGH & 27 LEFT OF PLAN MUD WT TO 8.8/37 NOV RUNNING CONVENTIONAL SMALL SIZE CUTTING .HOLE IN GOOD CONDITION CHANGE ELEVATORS,,WILL NOT LATCH DIR DRILL HORIZONTAL 6.125 HOLE FROM F/8571' TO TD 8600=29AVG 29 '/HR WOB 6/9 ,RPM 70/174 = 244 STKS 72 = 301 GPM,PSI 1900/2250 DIFF 350 TORQ 8200DRILLING,OFF BOTTOM 5200 STWT 162 UP- ROT 112 SO 84 SLIDE 20 ' @24 % ROTATE 67 @76 % 12 HIGH & 27 LEFT OF PLAN MUD WT TO 8.8/37 NOV RUNNING CONVENTIONAL
	2:00 5.00	0.00	201 202	25	•	_	SMALL SIZE CUTTING .HOLE IN GOOD CONDITION
	3:00 - 5:00 5:00 - 11:00	2.00 6.00	DRLPRO	05	C E	P P	CIRCULATE 4 BOTTOMS UP FOR SHORT TRIP
	11:00 - 12:00	1.00	DRLPRO DRLPRO	06 05	A	P	WPER TRIP TO 7" CASING SHOE @ 5067 CIRC BOTTOM UP TWICE ( SHAKER WHERE CLEAN.
	12:00 - 19:00	7.00	DRLPRO	06	В	P	T.O.H F/ LOGS - W/ 20 - 25 K OVER STRIMG WT - MUD WT 9.0 VIS 37,LAY DOWN DIR TOOLS ANB BIT
	19:00 - 0:00	5.00	EVALPR	11	D	P	SAFETY MEET W/SCHLUMBERGER & RIG CREW,RIG UP/ PICK UP LOGGING TOOLS /SURFACE TEST,TRIP IN 49 STNDS TO 4660',WITH TOOLS,CIRC,INSTALL SIDE DOOR AND RIG UP SHIVES
4/18/2012	0:00 - 7:30	7.50	EVALPR	11	D	P	T.I.H W D.P & LOGGING TOOLS & LOG DOWN TO  @ 8560 W SCHLUMBERGER PIPE CONVEYED TLC  TRIPLE COMBO/FMI LOGGING TOOL
	7:30 - 11:30	4.00	EVALPR	11	D	Р	T.O.H W/ D.P WHILE LOGGING OUT @ 8560 W/ SCHLUMBERGER PIPE CONVEYED TLC TRIPLE COMBO/FMI LOGGING TOOL
	11:30 - 13:00	1.50	EVALPR	11	D	P	RIG DOWN LOGGERS SIDE ENTRY PORT & SUBS & T.O.H W/ WIRELINE & R/D WIRELINE FROM DERRICK
	13:00 - 15:30	2.50	EVALPR	11	D	P	CONT T.O.H W/ DRILL PIPE
	15:30 - 16:30	1.00	EVALPR	11	D	P	FINISH R/D SCHLUMBERGER LOGGING TOOLS
	16:30 - 18:30	2.00	DRLPRO	09	Α	Р	SLIP & CUT DRILL LINE 245'
	18:30 - 19:00	0.50	DRLPRO	07	Α	P	RIG SERVICE
	19:00 - 0:00	5.00	DRLPRO	06	E	Р	PICK UP MILL TOOTH BIT,1 JT DP,PACKERS PLUS REAMER TIH TO 4100', FILL PIPE RECORD PU/SO WEIGHT 88/86/85,TIH TO 4900' PU/SO WTS UP 109 /104/98
4/19/2012	0:00 - 1:00	1.00	DRLPRO	06	E	P	TRIP IN WITH PACKERS PLUS REAMING ASSEMBLY

7/6/2012 11:15:48AM

## **Operation Summary Report**

Well: MAVERICK 921-26B-HZ Spud Date: 2/23/2012 Project: UTAH-UINTAH Site: MAVERICK 921-26B-HZ PAD Rig Name No: ENSIGN 139/139, CAPSTAR 310/310 Event: DRILLING End Date: 4/21/2012 Start Date: 1/24/2012

Active Datum: RKB @4,931.00usft (above Mean Sea

UWI: NW/NE/0/9/S/21/E/26/0/0/26/PM/N/681/E/0/1512/0/0

Level)	<b></b>								
Date		Time	Duration	Phase	Code	Sub	P/U	MD From	Operation
	St	art-End	(hr)			Code		(usft)	
	1:00	- 14:30	13.50	DRLPRO	03	E	Р		WASH & REAM AS PER PACKERS PLUS ASSEMBLY HAND,FROM 5458 TO TD 8600'
	14:30	- 16:00	1.50	DRLPRO	05	F	Р		CIRCULATE & CONDITION HOLE FOR WELLBORE CLEANUP
	16:00	- 21:30	5.50	DRLPRO	06	E	Р		SHORTTRIP TO 7" CSG SHOE,TIH W/REAMER ,NO TIGHT HOLE
	21:30	- 23:00	1.50	DRLPRO	05	С	P		CIRC AND CONDITION HOLE F/ TRIP OUT WITH REAMER TO PICK UP PACKERS PLUS SHAKERS CLEAN
	23:00	~ 0:00	1.00	DRLPRO	06	Α	P		SAFETY MEET W/ RIG CREW,FLOW CHECK/NO FLOW,PULL OUT 5 STNDS,PUMPPILL,FLOW CHECK AGAIN OK
									DROP 1 15/16 RABBIT,TRIP OUT OF HOLE WITH REAMER ASSEMBLY,HOLE IS IN GOOD SHAPE
4/20/2012	0:00	- 6:30	6.50	DRLPRL	06	Α	Р		FINISH L/D BHA TOOLS
	6:30	- 7:00	0.50	DRLPRL	08	Α	P		SER RIG
	7:00	- 8:00	1.00	DRLPRL	12	С	P		HELD SAFETY MEETING & R/U TESCO CASING CREW TO RUN LINER
	8:00	- 11:00	3.00	DRLPRL	22	L	Z		WORK TESCO TONG TORQUE TURNS ( COULDN'T GET TORQUE TURN TO DOWN LOAD WELL TO COMPUTOR TO SET UP CASING JOB ON TORQUE TURNS.
	11:00	- 0:00	13.00	DRLPRL	12	С	P		RUN 4.5 LINER WITH PACKERS & FRAC PORTS WHICH IS LINER TOP@ 4,125 & LINER LENGTH 4,464 SHOE SET @ 8,590 - & FILL EVERY 20 JTS & TOTAL CASING 94 JTS OF 4.5 - 11.6 - DQX P-110 & LINER HANGER
4/21/2012	0:00	- 1:00	1.00	DRLPRÓ	12	C	P		FINISH RUN 4.5 LINER WITH PACKERS & FRAC PORTS, LINER TOP@ 4,125 & LINER LENGTH 4,464 SHOE SET @ 8,590 - & FILL EVERY 20 JTS & TOTAL CASING 94 JTS OF 4.5 - 11.6 - DQX P-110 & LINER HANGER, NEUTRAL WT 112K,DOWN 72K FINAL SLIDING IN
	1:00	- 3:30	2.50	DRLPRO	12	D	P		FILL PIPE, BREAK CIRC, PUMP 97.7 BBLS 3% KCL BEHIND 1.125 BALLS, @1-3 BBLS 440 PSI, LAND BALLS PRESSURE UP TO 2140 PSI, SET HANGER, PUSH PULL TEST TWICE FROM 167K TO 85K, CLOSE PIPE RAMS, PRESSURE TEST ANNULAS TO 3010 FOR 15 MIN, TEST GOOD, PRESSURE UP ON DP TO 2765 TO SET PACKERS, BLED PRESSURE, PRESSURE UP ANNULAS TO RELEASE SETTING TOOL, BLED PRESSURE, OPEN PIPE RAMS P/U TO 122K TO PULL OUT OF SETTING TOOL, FLOW CHECK OK, PACKERS PLUS ASSEMBLY LANDED 4125' TO 8590'
	3:30	- 4:00	0.50	DRLPRO	05	G	Р		DISPLACE 100 BBLS KCL IN 7" CASING TO SURFACE@ 7 BBLS MIN 870 PSI FLOW CHECK /NO FLOW
	4:00	- 4:30	0.50	DRLPRO	12	В	Р		RIG DOWN BJ SERVICE,SAFETY MEET WITH RIG CREWS FOR LAYDOWN DP,FLOW CHECK /NO FLOW
	4:30	- 19:00	14.50	DRLPRO	06	J	P		LDDP & HWDP TO LAY DOWN SETTING TOOL,CONTINUE TIH AND LAYDOWN DP IN DERRICK,LOAD OUT RENTAL PIPE FOR RETURN

7/6/2012 11:15:48AM

		US ROC	KIES REGIO			
Well: MAVERICK 921-26B-HZ			Spuc	Date: 2/23/2012		
Project: UTAH-UINTAH	Site: MA	VERICK 921-26B-I	HZ PAD	Rig Name No: ENSIGN 139/139, CAPSTAR 310/310		
Event: DRILLING	Start Da	te: 1/24/2012		End Date: 4/21/2012		
Active Datum: RKB @4,931.00usft (above Mea	ın Sea	UWI: NW/NE/0/9	/S/21/E/26/0/0/2	6/PM/N/681/E/0/1512/0/0		
Date Time Duration Start-End (hr)		Code Sub Code		D From Operation (usft)		
19:00 - 0:00 5.00		01 E	Р	TRANSFER MUD & CLEANING PITS W/ PRICE PIG		

TRUCK,RIG RELEASE @23:59 MIDNIGHT 4/21/2012

7/6/2012

11:15:48AM

					U	S ROC	KIES R	EGION	
					Opera	tion S	Summa	ary Report	
Well: MAVERICE	<b>S</b> 921-26	B-HZ		<u> </u>	<u>alaka Siiri yi</u>			Spud Date: 2/23	3/2012
Project: UTAH-U	INTAH	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Site: MA\	ERICK 9	21-26B-I	HZ PAD		Rig Name No:
Event: COMPLE	TION			Start Date	e: 4/26/20	12			End Date:
Active Datum: RI Level)	KB @4,	931.00usft (ab	ove Mean Se	a	UWI: N	<b>N/NE</b> /0/9	)/S/21/E/2	6/0/0/26/PM/N/68	1/E/0/1512/0/0
Date		Time tart-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
4/26/2012	8:00	- 18:00	10.00		34		Р		8AM [DAY 1] JSA - MAN LIFT, SLIPS, TRIPS, FALLS.N/U EQUIPMENT, PRESSURE TESTING CASING, WIRE LINE WORK.
									PRIOR TO MIRU, CAMERON N/U 7" X 10K FRAC STACK ON WELL HEAD.
									MIRU CASED HOLE SOLUTIONS & B&C QUICK TEST. OPEN BRADEN HEAD VALVE AND LOCK OPEN. TOP OFF CSG W/ 5 BBLS FW W/ WATER TRUCK. RIH W/ BAKER 4-1/2" RBP & SET AT 4235.5'. B&C PRESSURED UP CSG AND HELD 1000# WHEN SETTING RBP.BLED OFF PSI. POOH & L/D TOOLS.
									P/U RADIAL BOND TOOLS & LOG WELL FROM 4232' TO SURFACE. B&C HELD 2200# ON CSG WHILE RUNNING CBL. BLEED OFF PSI. POOH, L/D TOOLS, RDMO CHS.
									CONTINUE P.T. CSG WITH B&C QUICK TEST. P.T. TO 8500# FOR 1 HOUR. LOST 46 PSI IN 30 MIN. LOST 92 PSI IN 1 HR. RDMO B&C TESTERS. CHARTED AND DIGITAL TEST.
									6PM SWI-SDFN
4/28/2012	9:00	- 11:00	2.00	COMP	47	A	P		Spot flowback manifold and tank. Set frac tank for 2% KCL for plug retrieval/ Venturi run. 390 bbls delivered to location. Lightplants delivered and spotted for CTU operations.
	11:00	- 15:30	4.50	COMP	47	В	P		Rig up B & C quick test pressure truck. PSI casing to 8500 psi. Close bottom 7" frac valve. Bleed down stack and test bottom 7". Good. PSI frac stack valves 8500# high/ 500 # low. Stack tested good.
	15:30	- 0:00	8.50	COMP	46	F	P		Cameron out to grease frac valves. RDMO B &C. SDFN. Basic/Maverick CTU in route from Casper, Wy. MIRU at daylight.
4/29/2012	0:00	- 6:30	6.50	COMP	46	D	P		Wait on daylight. Lead CTU to location.
	6:30	- 9:35	3.08	COMP	47	Α	Р		AOL, Spot in CTU, combination unit, crane. RU.
	9:35	- 10:49	1.23	COMP	47	Α	P		MU coil connection. Pull and psi test. MU motor connection, Baker retrieving tool.
	10:49		0.27	COMP	48		P		Safety meeting. PSI test coil, wh connection.
		- 14:40	3.58	COMP	32		P		Open well. RIH w/ coil, retrieving tool. Tag TOL 4160'. Tried repeatedly to work through TOL, indexing tool, rotation, different weights and injection rates. No luck. POOH.
	14:40		1.37	COMP	32		P		OOH w/ coil, tools.
		- 19:00	2.97	COMP	46	F	P		Inspect tools, Hot shot Baker mule shoe, 8' sub extension. Add lubricator.
	19:00		0.33	COMP	47	Α	P -		MU sub and mule shoe w/ overshot.
	19:20	- 20:16	0.93	COMP	32		Р		4050', Weight check 17000#.

7/6/2012

## **Operation Summary Report**

Well: MAVERICK 921-26B-HZ Spud Date: 2/23/2012 Project: UTAH-UINTAH Site: MAVERICK 921-26B-HZ PAD Rig Name No: Event: COMPLETION End Date: Start Date: 4/26/2012

	Sta	Fime art-End - 21:21	Duration (hr)	Phase	Code	N 10 S 1 S 1 S 1 S 1			
			£429.5		-	Sub Code	P/U	MD From (usft)	Operation
2			1.08	COMP	32		Р	,	Tag TOL 4159'. Set down, increase pump rate, indexing tool rotating. Repeated approach attempts to work in TOL.
	1:21	- 21:39	0.30	COMP	32		Р		Through liner top. Work down to top of plug, latch plug, set down 5000#, 4266'.
2	1:39	- 22:26	0.78	COMP	32		Р		RIH past plug depth 4279'. POOH.
2:	2:26	- 23:38	1.20	COMP	32		Р		Tag up w/ coil/tools. Break down off WH. Plug looked good, all elements,rubbers intact. B/D tools. Release Baker toolhand.
	3:38	- 0:00	0.37	COMP	47	Α	Р		M/U Basic Venturi tool.
4/30/2012	0:00	- 1:11	1.18	COMP	47	Α	P		M/U Venturi Basket to CT. HU to wellhead. PSI Test.
1	1:11	- 2:10	0.98	COMP	32	Α	Р		OW, RIH to 3995'. Weight check 15000#. 2.5 bpm circulation rate.
2	2:10	- 2:23	0.22	COMP	32	Α	Р		Circ rate 2.5 bpm. Work through TOL 4163'.
2	2:23	- 3:05	0.70	COMP	32	Α	Р		Venturi @ 5214', circulate above top of first sleeve. Pump 20 bbl sweep. POOH.
3	3:05	- 3:45	0.67	COMP	32	Α	Р		Repeat pass through TOL. Pump 20 bbl sweep. POOH.
3	3:45	- 5:40	1.92	COMP	32	Α	Ρ		@ surface with tools. SIW. RD off wellhead.
	5:40	- 6:00	0.33	COMP	32	Α	Р		B/D Venturi, find brass pins, shear screws, pea sized gravel, rubber pieces up to 1". Plastic debris.
6	3:00	- 9:00	3.00	COMP	47	Α	Р		RDMO CTU.
9	9:00	- 0:00	15.00	COMP	46	F	Р		Pit being lined and begin filling. Prep for DFIT 5/4/12.
5/4/2012	0:00	- 8:01	8.02	COMP	46	F	Р		Well shut in. Wait on DFIT.
	3:01	- 10:00	1.98	COMP	47	Α	Р		MIRU Halliburton HHP, RNI transports, Halliburton tools. RU to 2" off tbg hd.
	0:00	- 10:20	0.33	COMP	48		Р		Safety meeting
		- 11:00	0.67	COMP	47	В	Р		Prime up and psi test surface lines to 2" off tbg head. 8200 psi test. Good.
		- 11:15	0.25	COMP	36	E	Р		OW, zero psi. Rate to 1.9 bpm. Casing/liner psi increase to 3553 psi. Port shifted. Watch psi line out 1990 psi. Increase rate to 10 bpm rate.
•		- 11:30	0.25	COMP	36	E	₽		10 bpm rate established with 22 bbls pumped. PSI 2470. Pump 100 bbls/10 bpm. PSI before SD 2373#.
		- 11:36	0.10	COMP	33	G	P		SD, 122 total bbls pumped. ISIP 1890.
		- 11:40	0.07	COMP	33	G	P		10 min SI psi 1290.
		- 11:36	0.00	COMP	33	G	Р		5 min SI psi 1474.
		- 11:45	0.08	COMP	33	G	P -		15 min SI psi 1150.
		- 12:00	0.25	COMP	47	Α	Р		Secure Halliburton gauges. LOTO 2" valves for recording.
	2:00	- 13:15	1.25	COMP	47	Α	P		RDMO HHP, RNI transports.
	3:15	- 0:00	10.75	COMP	33	G	P		DFIT gauges monitoring and recording fall-off psi.
	0:00	- 0:00	24.00	SUBSPR	33	G	P		Well shut in. Halliburton DFIT gauges recording psi.
	0:00	- 0:00	24.00	SUBSPR	33	D -	P		Well shut in. Halliburton DFIT gauges recording psi.
5/7/2012 9	9:30	- 10:30	1.00	FRAC	33	D	P		Halliburton downloaded and rigged down DFIT gauges. Data Good. Well shut in. Prep for frac. Build flowback containment berm and flare stack berm for Pure.
5/9/2012	0:00	- 7:00	7.00	COMP	46	F	Р		WELL SHUT IN WAITING ON FRAC

## **Operation Summary Report**

Spud	Spud Date: 2/23/2012							
Site: MAVERICK 921-26B-HZ PAD	Rig Name No:							
Start Date: 4/26/2012	End Date:							
	Site: MAVERICK 921-26B-HZ PAD	Site: MAVERICK 921-26B-HZ PAD Rig Name No:						

vent: COMPLE	HON		Start Dat	e: 4/26/20	12			End Date:		
Active Datum: RI evel)	KB @4,931.00usft (a)	above Mean S	ea	UWI: N	N/NE/0/9/	S/21/E/26/0/0/26/PM/N/681/E/0/1512/0/0				
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation		
	7:00 - 16:00	9.00	COMP	47	A	P		MIRU TWO DUCK PONDS FOR FLOW BACK AND ONE DUCK POND FOR FLARE STACK,MIRU FOUR FRAC MASTERS AND TWO OPEN TOP FRAC TANKS INTO FLOWBACK CONTAINMENT / SDFN,WELL SHUT IN WAITING ON FRAC		
	16:00 - 0:00	8.00	COMP	46	F	P		WELL SHUT IN WAITING ON FRAC		
5/10/2012	0:00 - 7:00	7.00	COMP	46	D	P		WAIT ON DAYLIGHT		
	7:00 - 9:00	2.00	COMP	46	Ē	P		WAIT ON PURE TO GET TO LOCATION WITH EQUIPMENT TO START RIG UP		
	9:00 - 17:00	8.00	COMP	47	A	Р		MIRU PURE FLOWBACK EQUIPMENT / HALLIBURTON MANIFOLD, SWEET WATER TRANSFER PUMP, PLACE WATER TRANSFER PUMP IN CONTAINMENT AS WELL AS PURE FLARE STACK IN CONTAINMENT / WELL SHUT IN WAITING ON FRAC / SDFN		
	17:00 - 0:00	7.00	COMP	46	D	P		WAIT ON DAYLIGHT / WELL SHUT IN WAITING ON FRAC		
5/11/2012	0:00 - 7:00	7.00	COMP	46	D	Р		WAIT ON DAYLIGHT, WELL SHUT IN WAITING ON FRAC		
	7:00 - 17:00	10.00	COMP	47	A	P		HAVE SAFETY MTG.FINISH MIRU WITH PURE FLOWBACK, HAUL IN FRESH WATER FROM TOWN TO FILL UP HEATER TREATER, CHLORINATE BOTH WATER CONTAINMENTS AND FRAC TANKS, ROLL CONTAINMENTS WITH PUMPS AND TANKS WITH TRUCKS, SDFN		
								250 GAL OF BLEACH IN EACH CONTAINMENT POND AND 5-10 GAL IN EACH FRAC TANK		
	17:00 - 0:00	7.00	COMP	46	D	P		WAIT ON DAYLIGHT, WELL SHUT IN WAITING ON FRAC		
5/12/2012	0:00 - 7:00	7.00	COMP	46	D	P		WELL SHUT IN WAITING ON FRAC, WAIT ON DAYLIGHT FOR FRAC PREP		
	7:00 - 17:00	10.00	COMP	47	Α	P		HALLIBURTON PULLED WATER SAMPLES,PRESSURE TESTED FLOWBACK IRON TO 8,500=GOOD TEST,MIRU MOUNTAIN MOVERS AND STARTED HAULING SAND OUT OF VERNAL		
	17:00 - 0:00	7.00	COMP	46	D	P		WELL SHUT IN WAITING ON FRAC		
5/13/2012	0:00 - 7:00	7.00	COMP	46	D	Р		WAIT ON DAYLIGHT		
	7:00 - 18:00	11.00	COMP	46	F	Р		HALLIBURTON PULLING WATER SAMPLES OUT OF BOTH PONDS AND TANKS FOR A 48 HOUR TEST AFTER CHLORINE WAS ADDED / HAULING SAND		
	18:00 - 0:00	6.00	COMP	46	F	P		WELL SHUT IN WAITING ON FRAC		
5/14/2012	0:00 - 7:00	7.00	COMP	46	D	P		WELL SHUT IN WAITING ON DAYLIGHT		
	7:00 - 14:00	7.00	COMP	47	Α	Р		PT WATER TRANSFER LINES,MIRU HOT OILER HEA WATER IN LOWER POND AND IN THE 30 FRAC TANKS TO 75 DEGREES		
	14:00 - 0:00	10.00	COMP	46	D	P		WELL SHUT IN WAITING ON DAYLIGHT-FRAC CREW		
5/15/2012	0:00 - 7:00	7.00	COMP	46	D	Р		WELL SHUT IN WAITING ON DAYLIGHT		
	7:00 - 9:30	2.50	COMP	47	Α	P		MIRU OIL STATES / BAKER CLAY CARE/RAIN FOR RENT WITH DUCK PONDS		
	9:30 - 14:30	5.00	COMP	47	A	P		MIRU HALLIBURTON		
F/40/2005	14:30 - 0:00	9.50	COMP	46	D	P		WELL SHUT IN WAIT ON DAYLIGHT TO START 24 HOUR FRAC OPERATIONS		
5/16/2012	0:00 - 5:00	5.00	COMP	46	D	P		wait on daylight to start 24 hour frac operations		
	5:00 - 6:00	1,00	COMP	46	F	Р		crew travel		

## **Operation Summary Report**

Well: MAVERICK 921-26B-HZ	S	Spud Date: 2/23/2012								
Project: UTAH-UINTAH	Site: MAVERICK 921-26B-HZ PAD	Rig Name No:								
Event: COMPLETION	Start Date: 4/26/2012	End Date:								

Event: COMPLE	HON			Start Dat	e: 4/26/20	12	End Date:			
Active Datum: RI Level)	<b @4,9<="" th=""><th>31.00usft (a</th><th>bove Mean Se</th><th>ea</th><th>UWI: NV</th><th><b>N</b>/NE/0/9</th><th>/S/21/E/2</th><th>26/0/0/26/PM/N/681/E/0/1512/0/0</th></b>	31.00usft (a	bove Mean Se	ea	UWI: NV	<b>N</b> /NE/0/9	/S/21/E/2	26/0/0/26/PM/N/681/E/0/1512/0/0		
Date	March 2 79 50 17	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)		
	6:00	- 7:00	1.00	COMP	46	F	Р	start and warm up equipment		
	7:00	- 7:30	0.50	COMP	46	F	P	have safety mtg.		
	7:30	- 20:30	13.00	COMP	46	E	z	We had our safety meeting at 7:00 am as planned. Bucket testing went well and was completed by 8:30 am. Began priming up Halliburton pump trucks and just as pressure testing began Halliburton overpressured their lines to 15,000 psi. Work was halted to identify the problem and it was determined the pressure event was real (as opposed to a computer glitch). after investigation it was determined the pressure was caused by a transmission failure on the pump being used to pt with. pump was removed from the fleet. All the 10k iron is being replaced as well as the top master valve and flange. miru b&c quick test pressure test new frac valve to 8,500 psi top frac valve.rig up halliburton to wellhead, shut down until tomorrow morning. We will start over tomorrow morning at 7:00 am with a safety meeting followed by pressure		
								test.		
	20:30	- 0:00	3.50	COMP	46	D	P	wait on daylight		
5/17/2012	0:00	- 5:00	5.00	COMP	46	D	Ž	SHUT DOWN FOR NIGHT WAIT ON DAYLIGHT DUE TO OVER PRESSURE AND HALLIBURTON ONLY HAVING ONE CREW		
	5:00	- 6:00	1.00	COMP	46	F 	P	CREWTRAVEL		
	6:00	- 7:00	1.00	COMP	46	F -	P	START AND WARM UP EQUIPMENT		
	7:00	- 7:30	0.50	COMP	46	F	P	HAVE SAFETY MTG.		
	7:30	- 8:30	1.00	COMP	47	В	P	PRESSURE TEST LINES TO 8,500 PSI		
	9:54	- 9:54 - 16:17	1.40 6.38	COMP	46 36	В	Z P	Halliburton received a call to hold the start of the frac pending Duncan's review of data from yesterdays over pressuring incident. We do not have any time estimate of when we can start the frac.  Pressure testing has been successfully completed and we are currently waiting.  Stage 1 pumped nearly as designed with some stages extended to line out LA pumps and gel. ATP — 5292 psi; ATR — 38.8 bpm. Ball seated 1 bbl early with good shift at 12:55  Stage 2 pumped as designed. ATP — 5044 psi; ATR — 45 bpm. Ball seated 6 bbl early with good shift at 14:49		
		- 16:59 - 17:54	0.70 0.92	COMP	46 36	F B	Z P	Stage 3 pumped nearly as designed. Cut some spacer stages short to conserve gel. ATP – 4610 psi; ATR – 52.3 bpm. Ball seated 1 bbl early with good shift at 16:17. Had to shut down to wait on gel and to reboot IFS.  Had to shut down to wait on gel and to reboot IFS.  16:59 Resume pumping.  Stage 4 pumped as designed. ATP – 5064 psi; ATR – 58.8 bpm. Ball seated 1 bbl early with good shift		

7/6/2012

Well: MAVERIC	K 021 22	R.H7				<u>zestájtyí</u>	13-13-4-196	Iry Report
Project: UTAH-		D-∏ <u>∠</u>		Site: MA	VERICK 9	21-26P	H7 PAD	Spud Date: 2/23/2012
Event: COMPLE				·			IL FAU	Rig Name No:
Active Datum: F		31 Mue# (a	hove Mean So		e: 4/26/20		/S/21/F/26	End Date: 6/0/0/26/PM/N/681/E/0/1512/0/0
Level)	<u>@</u> , :	o i .oousii (a	DOVE MEAN OF	ea .			,0,21,520	500012511 (WWG00 172107 10 12) 010
Date	S	Time tart-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)
	17:54	- 19:42	1.80	COMP	36	В	Р	Stage 5 pumped nearly as designed. Stayed at 2.5 ppg due to higher treating pressure. ATP – 5046 psi; ATR – 60.9 bpm. Ball seated 6 bbl late with good shift at 18:50.
								Stage 6 pumped as designed. ATP – 4196 psi; ATR – 59.2 bpm. Ball seated 3 bbl early with good shift at 19:42.
		- 20:15	0.55	COMP	46	F	Z	Had to shut down to wait on gel.
	20:15	- 21:15	1.00	COMP	36	В	Р	Stage 7 pumped as designed. ATP – 4794 psi; ATR – 60.8 bpm. Ball seated 9 bbl early with good shift at 21:15.
		- 22:08	0.88	COMP	36	В	Р	Stage 8 pumped as designed. ATP – 4883 psi; ATR – 61.3 bpm. Ball seated 1 bbl early with good shift at 22:08.
	22:08	- 22:54	0.77	COMP	36	В	Р	Stage 9 nearly screened out when 0.5 ppg 100 mesh hit formation. Lowered rate to 50 bpm and cut sand. Started crosslinked gel. Let pressures line out. Pumped 1 min stages of 0.1 ppg 100 mesh and 0.25 ppg 100 mesh. Saw slight pressure increases even with these low sand concentrations. Had 2000 ibs of 100 mesh on belt so unable to try a low concentration of 20/40. ATP – 5443 psi; ATR – 51.3 bpm. Ball seated 2 bbls late with good shift at 22:54.
		- 23:52	0.97	COMP	36	В	P	Stage 10 pumped as designed. ATP – 4930 psi; ATR – 61 bpm. Ball seated with good shift at 23:52.
		****	0.13	COMP	36	В	P	START STAGE 11
5/18/2012	0:00	- 0:42	0.70	FRAC	36	В	Р	Stage 11 pumped as designed. ATP – 4608 psi; ATR – 61.1 bpm. Ball seated 2 bbls late with good shift.
	0:42	- 1:32	0.83	FRAC	36	В	₽	Stage 12 Pumped as designed. ATP ~ 4490 psi; ATR – 61.1 bpm. Ball seated 11 bbls early with good shift.
								Shut down to check fuel levels. Expect to be down ~ 3 hrs waiting on fuel.
								ISIP 3039 psi 5 min 2331 psi 10 min 2250 psi 15 min 2174 psi
	1:32	- 5:00	3.47	FRAC	46	F	S	Waiting on fuel driver from Vernal.
	5:00	- 5:52	0.87	FRAC	36	8	P	Stage 13 Pumped as designed. ATP – 4687 psi; ATR – 59.7 bpm. Ball seated 7 bbls early with good shift.
	5:52	- 6:41	0.82	FRAC	36	В	Р	Stage 14 pumped as designed. ATP 4264 psi; ATR 61.2 bpm. Ball seated 8 bbl early with good shift.
	6:41	- 7:31	0.83	FRAC	36	В	P	Stage 15 pumped as designed. ATP – 3935 psi; ATR – 61.1 bpm. Ball seated 13 bbl early with good shift.

7/6/2012

Well: MAVERICK 921-26B-HZ	· · · · · · · · · · · · · · · · · · ·				Spud Date: 2/23/2012
Project: UTAH-UINTAH	Site: MAV	ERICK 9	21-26B-F	IZ PAD	Rig Name No:
Event: COMPLETION	Start Date			<u>.                                    </u>	End Date:
Active Datum: RKB @4,931.00usft (above Mean Sea Level)	1	UWI: N	W/NE/0/9	/S/21/E/26	0/0/26/PM/N/681/E/0/1512/0/0
Date Time Duration Start-End (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)
7:31 - 8:23 0.87 8:23 - 13:30 5.12	FRAC	36	В	P	Stage 16 pumped as designed. ATP – 4013 psi; ATR – 61.3 bpm. Job Complete at 08:23 Total Job Clean Volume: 48,519 bbl ISIP: 2,562 psi (0.99 FG) 5 min: 2,180 psi 10 min: 2,040 psi 15 min: 1,947 psi Coil should be on location about noon to begin drillout. Halliburton wants minimum 10 hrs for resin to set up. Will not begin drill-out of sleeves until 1830 hrs. RDMO Halliburton frac equipment.
	DRLOUT	47 47	A	P	
75.55 17.50 3.50	DREGOT	41	^	r	HES RDMOL. Deliver 1560 bbls water to location. Batch and unload in 8 worktanks for drill-out. Begin Heating with Action Hot Oil Service. Release 5 light plants and 6 portajohns. Change out trash trailer.
					MIRU Basic/Maverick CTU. Safety meeting. Spot in combo unit and lay 2" hardline. NU BOP's, lubricator. MU coil connection, pull and psi test. MU motor connection, motor, NOV agitator, 5 blade- 3.8125" mill. M/U to wellhead. PSI test coil and lubricator, WH connection 6500 psi. SD, wait on resin sand to cure.
	DRLOUT	46	Α _	P	Waiting for resin sand in formation to cure.  Halliburton recommended waiting 10 hours post frac before flowing well.
	DRLOUT DRLOUT	32 32	F F	P P	OW, RIH.
	DRLOUT	32	F	P	Roll pump over .5 bpm, flowback .5 bpm. Tight spot in casing 966'. Increase rate to agitate. RIH.  @ 4000'. Weight check 10000#. RIH, no issue
10.04	DI LOGI	02	•	•	working through TOL.
	DRLOUT	32	F	P	
19:36 - 19:50 0.23	DRLOUT	32	F	P	Through sleeve #1. Send 10 bbl sweep. 3923 circ psi. 1223 wh psi. 2.5 bpm circ rate, 3.5 bpm flowback.
	DRLOUT	32	F	Р	Tag sleeve #2 5474'. 3581 circ psi, 1224 wh psi. String weight 6224.
	DRLOUT	32	F	Р	Through sleeve #2. 10 bbl sweep. 3664 circ psi. 1211 wh psi.
	DRLOUT	32	F	P	Tag sleeve #3 5722'. 3787 circ psi, 1205 wh psi. String weight 5535.
	DRLOUT	32 32	F F	P P	Through sleeve #3. 10 bbl sweep. 3928 cicr psi, 1243 wh psi.
	DRLOUT	32	F	Ė	Tag sleeve #4 5922'. 3679 circ psi, 1277 wh psi. String weight 5566. Through sleeve #4. 10 bbl sweep. 3830 circ psi,
	DRLOUT	32	F	P	1237 wh psi.  Tag sleeve #5 6160'. 3874 circ psi, 1220 wh psi.
21:53 - 22:00 0.12	DRLOUT	32	F	P	String weight 4714. Send 20 bbl sweep.  Tag sleeve #6 6356'. POOH above TOL for wiper

7/6/2012

## **Operation Summary Report**

Well: MAVERICK 921-26B-HZ Spud Date: 2/23/2012 Project: UTAH-UINTAH Site: MAVERICK 921-26B-HZ PAD Rig Name No: **Event: COMPLETION** End Date: Start Date: 4/26/2012

Active Datum: RKB @4,931.00usft (above Mean Sea					UWI: NW/NE/0/9/S/21/E/26/0/0/26/PM/N/681/E/0/1512/0/0								
Level)													
Date	61 7 7 7	Time lart-End	Duration	Phase	Code	Sub	P/U	MD From Operation					
	22:00	- 22:59	(hr) 0.98	DRLOUT	32	Code F	<u>         </u>	(usft) (a 4000', Wiper completed, RIH,					
	22:59		0.73	DRLOUT	32	F	Р	Re-tag sleeve #6 6354'. 3784 circ psi, 1140 wh psi.					
	23:43							String weight 3629.					
E /40/0040	0:00	~ 0:00	0.28	DRLOUT	32	F	P	Drilling on steeve #6.					
5/19/2012		- 0:15	0.25	DRLOUT	32	F	Р	Through plug #6. Send 10 bbl sweep. Circ psi 3912, WH psi 1218. 2.5 bpm circ rate/ 3.5 bpm return to flowback.					
	0:15	- 0:22	0.12	DRLOUT	32	F	P	Tag sleeve #7 6592'. Circ psi 3947, wh psi 1115. String weight 3431.					
	0:22	- 0:48	0.43	DRLOUT	32	F	P	Through sleeve #7. Send 10 bbl sweep. Circ psi 2826, WH psi 1206.					
	0:48	- 0:54	0.10	DRLOUT	32	F	P	Tag sleeve #8 6788'. Circ psi 3838, WH psi 1180. String weight 2460.					
	0:54	- 1:16	0.37	DRLOUT	32	F	P	Through sleeve #8. Send 10 bbl sweep. Circ psi 3560, wh psi 1128.					
	1:16	- 1:21	0.08	DRLOUT	32	F	P	Tag sleeve #9 7025'. Circ psi 3659, wh psi 1133. String weight 880.					
	1:21	- 1:39	0.30	DRLOUT	32	F	Р	Through sleeve #9. Send 10 bbl sweep. Circ psi 3827, wh psi 1079.					
	1:39	- 1:43	0.07	DRLOUT	32	F	P	Tag sleeve #10 7221'. Circ psi 3716, wh psi 1076. String weight 150.					
	1:43	- 1:56	0.22	DRLOUT	32	F	P	Through sleeve #10. Send 10 bbl sweep. Circ psi 3658, wh psi 1094.					
	1:56	- 2:01	0.08	DRLOUT	32	F	P	Tag sleeve #11 7411'. POOH for wiper run above TOL.					
	2:01	- 3:04	1.05	DRLOUT	32	F	Р	@ TOL 4000'. RIH.					
	3:04	- 4:08	1.07	DRLOUT	32	F	P	Re-tag sleeve #11 7411'. Circ psi 3890, wh psi 1089. String weight 3583.					
	4:08	- 4:20	0.20	DRLOUT	32	F	P	Through sleeve #11, Send 10 bbl sweep. Circ psi 3595, wh psi 1019.					
	4:20	- 4:30	0.17	DRLOUT	32	F	Р	Tag sleeve #12 7604'. Circ psi 3557, wh psi 1064. String weight 4780.					
	4:30	- 4:59	0.48	DRLOUT	32	F	P	Through sleeve #12. Send 10 bbl sweep. Circ psi 3517, wh psi 981.					
	4:59	- 5:09	0.17	DRLOUT	32	F	P	Tag sleeve #13 7843'. Circ psi 3904, wh psi 1024. String weight 3006.					
	5:09	- 5:54	0.75	DRLOUT	32	F	Р	Through sleeve #13. Send 10 bbl sweep. Circ psi 4007, wh psi 1043.					
	5:54	- 5:58	0.07	DRLOUT	32	F	Р	Tag sleeve #14 8040', Circ psi 4144, wh psi 1043. String weight 4031.					
	5:58	- 6:27	0.48	DRLOUT	32	F	Р	Through sleeve #14. Send 10 bbl sweep. Circ psi 3821, wh psi 1048.					
	6:27	- 6:38	0.18	DRLOUT	32	F	P	Tag sleeve #15 8279'. Circ psi 3868, wh psi 984. String weight 37.					
	6:38	- 6:52	0.23	DRLOUT	32	F	P	Through sleeve #15. Send 20 bbl sweep.					
	6:52	- 7:11	0.32	DRLOUT	32	F	P	@ PBTD 8578', Another 20 bbl sweep.					
	7:11	- 7:25	0.23	DRLOUT	32	F	P	Sweep on bottom. POOH.					
	7:25	- 11:34	4.15	DRLOUT	32	F	Р	@ surface with drill-out tools. Secure well, B/D off WH.					
								Basic changing out mechanical counter on reel. Reading erratic. Need to b/d lubricator and lay down					
	11:34	- 14:07	2.55	DRLOUT	47	С	z	injector. Replace mechanical counter.					

## **Operation Summary Report**

Spud Date: 2/23/2012 Well: MAVERICK 921-26B-HZ Project: UTAH-UINTAH Site: MAVERICK 921-26B-HZ PAD Rig Name No: Event: COMPLETION Start Date: 4/26/2012 End Date:

HWI: NW/NF/0/9/S/21/F/26/0/0/26/PM/N/681/F/0/1512/0/0

Active Datum: RKB @4,931.00usft (above Mean Sea Level)						UWI: NW/NE/0/9/S/21/E/26/0/0/26/PM/N/681/E/0/1512/0/0							
Date		Time tart-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usff)					
	14:07	- 14:36	0.48	DRLOUT	32	1	Р	M/U Venturi Basket/tools. Pull/PSI test. M/U to wellhead.					
		- 14:56	0.33	DRLOUT	32	Α	P	Open well/equalize. RiH. Bring on fluid rate .5 bpm/ .5 bpm to flowback. Proceed in well.					
	14:56	- 15:44	0.80	DRLOUT	32	A	P	weight check 0.5 bpm depth= 3,850 sw= 10,000 cp= 1051 whp=914 raise fluid rate to 2.5 bpm switch to 100 degree					
	15:44	- 18:24	2.67	DRLOUT	32	A	P	water/rih tag botton pooh to tol bpm=2.5 depth=8,534 sw=18,345 cp=2930 whp=836 cycles=1					
	18:24	- 20:10	1.77	DRLOUT	32	Α	P	@ tol rih 100' bpm=2.5 depth=4,000' sw=11,861 cp=2869 whp=805					
	20:10	- 20:13	0.05	DRLOUT	32	Α	P	@ depth pooh depth=4,200					
	20:13	- 21:40	1.45	DRLOUT	32	Α	Р	shut down fluid , ooh , nd venturi ,míru protechnics with spectraScan log					
	21:40	- 0:00	2.33	DRLOUT	32	Α	P	rih with log tool to 3,900' slow down to 35' / min. start logging					
5/20/2012	0:00	- 0:49	0.82	COMP	41	D	Р	RUNNING TO 8,000' WITH SPECTRASCAN LOG,START LOGGING OOH					
	0:49	- 3:06	2.28	COMP	32	Α	P	FLUID PUMP OFFLINE @ 2,500'					
	3:06	- 3:50	0.73	COMP	32	Α	P	OOH SHUT IN WELL					
	3:50	- 4:51	1,02	COMP	32	Α	P	ND TOOLS / LOG WAIT FOR DOWNLOAD TO CHECK FOR DATA					
	4:51	- 5:20	0.48	COMP	32	Α	P	LOG INFO GOOD, BLOW DOWN CTU WITH N2					
	5:20	- 6:00	0.67	COMP	32	A	Þ	ND FROM WELLHEAD, RDMO CTU					
	6:00	- 0:00	18.00	COMP	33	A	P	WELL FLOWING TO TANKS ON CLEAN UP, START UP PRODUCTION FACILITY, FLOWBACK WILL BE SENDING GAS AND OIL TO THE PRODUCTION FACILITY					
5/21/2012	0:00	- 5:00	5.00	COMP	33	Α	P	WELL FLOWING TO TANKS ON CLEAN UP					
	5:00	- 6:00	1.00	COMP	30	G	P	CREW TRAVEL					
	6:00	- 13:00	7.00	СОМР	30	A	Р	HAVE SAFETY MEETING MOVE IN RIG UP MILES WELL SERVICE RIG #1,AND GREAT WHITE SNUBBING UNIT,ND FRAC STACK,NU BOP					

MAN TOO	/ 00/ 00'	0 U7			<u> </u>	udalishin.	2000	Paul Data (1991)
Well: MAVERICH		B-HZ		Cita: MAN	(CDION )	04 00P !	IZ DAD	Spud Date: 2/23/2012
Project: UTAH-U				Site: MA\	/ERICK 9	21-26B-F	IZ PAD	Rig Name No:
Event: COMPLE		·	····	Start Date	<del></del>			End Date:
Active Datum: RI .evel)	KB @4,9	31.00usft (abo	ove Mean Se	a	UWI: N\	/V/NE/0/9/		/0/0/26/PM/N/681/E/0/1512/0/0
Date	St	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)
5/22/2012		- 19:00 - 20:00 - 0:00 - 0:00	1.00 4.00 24.00	COMP	34 33 33	B G A A	P P P	SWITCH OVER FLOWBACK FROM WING VALVES TO TUBING HANGER VALVES, MIRU PRESSURE TRUCK AND PRESSURE TEST MAG DISC TO 5000PSI, TEST BOP AND SNUB UNIT TO 3000PSI , SNUB IN TUBING, NU WELLHEAD, FILL TUBBING WITH WATER TUBBING SET @ 4,088' MIRU DELSCO WRELINE NU BROACH TOOL, RIH AND BROACH TUBING TO SEAT NIPPLE TAG @ 4066', POOH, NU TO CHISEL POINT TOOL, RIH TO BREAK OUT DISK TAG UP @ 4,088', HIT DISK THREE TIMES AND BREAK THROUGH DISK MOVING THROUGH A FEW TIMES TO MAKE SURE DISK ARE BROKE, POOH, RDMO WIRELINE FLOW WELL THROUGH TUBING ON CLEAN UP Well flowing to production through Pure separator. Oil and gas going from Pure separator to APC heater
5/23/2012	0:00	- 11:30	11.50	FLOWBK	33	Α	Р	treater. From treater to production battery and sales.  Well flowing to sales through Pure separator.
		- 15:00	3.50	FLOWBK	47	A	P	Shut in well to tie in flowline to tubing. Production team shooting fluid levels. Begin Rigging down Pure flowback equipment. Protechnics surveyed tanks and flowback lines for RM- tanks are clean. Begin cleaning flowback tanks.
	15:00	- 0:00	9.00	FLOWBK	50	A	P	Open well directly to heater treater and production facilities. Delsco Services monitoring well and facilities.
5/24/2012	0:00	~ 0:00	24.00	FLOWBK	50	A	P	Delsco monitoring well. Pure continuing rig down of flow-back equipment. Super Sucker cleaning open top flowback tanks and Pure separator. Final report CMP.
6/5/2012	7:00	-			50			WELL IP'D ON 6/5/12 - 504 MCFD, 238 BOPD, 0 BWPD, CP 902#, FTP 113#, CK 20/64, LP 69#, 24 HRS
6/21/2012	12:00	- 19:30	7.50	COMP	30		Р	SICP= 265#. SITP= 700#. MIRU. R/U HOT OILER. CNTRL WELL & FLUSH TBNG W/ 45 BBLS HOT TMAC. TMAC TREATED W/ PARAFIN SOLVENT. MIRU SLK LINE. RIH W/ SPEAR & PLUCK TBNG STO! @ 3900'. POOH W/ SLK LINE. RDMO SLK LINE. NDWH. NUBOP. R/U FLOOR. POOH W/ 129 JTS 2-7/8" J-55 TBNG. SWIFN.
	7:00							

7/6/2012

6/22/2012

11:17:23AM

7:00 - 7:15

0.25

COMP

48

SAFETY = JSA.

Vell: MAVERIC	K 921-26R-H7					***********	Spud Date: 2/2	3/2012		
Project: UTAH-U			Site: MAY	/ERICK 92	1-26R-H	7 PAD	opuu Dale. 2/2			
···						LIAD		Rig Name No:		
vent: COMPLE				e: 4/26/201:		2/24/5/25	(D. (D. (D. ) D. ) D. (D. )	End Date:		
.evel)	KKB @4,931.00usft (ab	ove Mean Se	ea		/NE/0/9/	S/21/E/26	/0/0/26/PM/N/68	1/E/0/1512/0/0		
Date	Time Start-End	Duration (hr)	Phase	化多分子系数子组织	Sub Code	P/U	MD From (usft)	Operation		
	7:15 - 13:30	6.25	СОМР	30		P		SICP= 300#. BLOW DOWN WELL IN 5MIN. STARTED FLOWING FLUID. CNTRL WELL W/ 70 BBLS TMAC. P/U & RIH W/ THE FOLLOWING:		
	13:30 - 19:30	6.00	СОМР	30		P		KB=14.00' HANGER= 1.00' 125 JTS 2-7/8" 6.4# J-55 = 3946.32' TAC = 3.05' 3 JTS 2-7/8" 6.4# J-55 = 94.77' 2-7/8" J-55 6.4# PUP JT = 4.07' H-F 2-1/4" TBNG PUMP= 24.03' 2-7/8" API SEATING NIPPLE= 1.10' X/O = 1.00' 7 JTS 2-7/8" ULTRA FLUSH JT TBNG = 221.28' LAST JT IS SLOTTED, NOSE TAPERED & HAS THRU PIN EOT@ 4310.62' PSN @4087.20' TAC@3961.30'  HAD TO TRICKLE FLUID ENTIRE TIME WHILE RIH W/TBNG. LAND WELL ON HANGER. NDBOP. UNLAND WELL. P/U TBNG PUP & SET TAC W/8000# TENSION OVER STRING WEIGHT. RE-INSTALL HANGER. LAND WELL. NUWH. MIRU HOT OILER. FLUSH TBNG W/50 BBLS HOT TMAC W/PARRAFIN SOLVENT ADDED. DROP ROD RETREIVABLE STANDING VALVE & PRESSURE TEST TBNG GOOD @ 1000#. P/U & RIH W/THE FOLLOWING:		
								1-1/2" X 30' SPRAY METAL POLISHED ROD  7/8" X 2' S-88 PONY ROD W/ SM CPLNG  7/8" X 4' S-88 PONY ROD W/ SM CPLNG  7/8" X 6' S-88 PONY ROD W/ SM CPLNG  7/8" X 8' S-88 PONY ROD W/ SM CPLNG  153 3/4" HIGH TENSIL S-88 SUCKER RODS W/ SM  CPLNGS. MOLD ON ROD GUIDES 3 PER ROD. =3825'  8 - 1-1/2" WEIGHT BARS. 200'  1- 7/8"X1.00' PONY. SM CPLNG.  H-F 3.00' X 2.25" SM PLUNGER.  SPACE OUT & SET PUMP ON TAG. PUMP NOT  STROKING PROPERLY. LONG STROKE PUMP BUT  NOT MAKING PROGRESS. SUSPECT PARRAFIN IN  THE BALLS AND SEATS. PREP FOR CHEMICAL  TREATMENT IN THE AM. SWIFN.		

7/6/2012 11:17:23AM 10

Well: MAVERIC	K 921-26B-HZ	<del>and the second </del>			Sı	oud Date: 2/23/2012
Project: UTAH-I	JINTAH		Site: MA	VERICK 921-26B-	<del></del>	Rig Name No:
Event: COMPLI	ETION		Start Da	te: 4/26/2012		End Date:
Active Datum: F	RKB @4,931.00	usft (above Mean Se			9/S/21/E/26/0/(	0/26/PM/N/681/E/0/1512/0/0
Level)						
Date	Time Start-En	d (hr)	Phase	Code Sub		MD From Operation (usft)
	7:15 - 18	30 11.25	COMP	30	P	SICP=0# SITP=0#. TRY TO LONG STROKE PUMP (NO LUCK). STILL POOR PUMP ACTION. DECIDE TO TRIP PUMP. SCREW ONTO SV. POOH W/ ROD STRING. PLUNGER & SV WERE PACKED W/ PARAFFIN. X/O PLUNGER & SV. MIRU HOT OILER. SPOT 15 BBLS HOT TMAC / SOLVENT DOWN TBNG. MIRU SLK LINE. RIH W/ PARAFFIN KNIFE TO TOP OF PUMP BARREL. POOH W/ SLK LINE (TBNG CLEAN). RDMO SLK LINE. FLUSH TBNG W/ 45 BBLS HOT TMAC / SOLVENT. SPOT 10 BBLS HOT DIESEL & DISPLACE TO 5 BBLS SHY OF PUMP BARREL. DROP SV AND GIVE IT 30 MIN. TO SEAT. PUMP 8 BBLS HOT TMAC & CATCH PRESSURE. TEST TBNG GOOD @1000#. RDMO HOT OILER. RIH W/ PLUNGER & ROD STRING. TRY TO STROKE PUMP BUT SUSPECT MORE TRASH IN TRAVELING VALVE. PUMP IS FALLING SLOWLY & HANGING UP. PISTON TYPE ACTION. LONG STROKE PUMP BUT NOT MAKING PROGRESS. SWIFN. PLAN TO FLUSH AGAIN IN THE AM.
6/24/2012	7:00 - 7	15 0.25	COMP	48	Р	SAFETY= JSA.
6/25/2012	7:15 - 18 7:00 - 7		COMP	30 48	P	SICP= 100#. SITP=0#. LONG STROKE PUMP BUT STILL STICKING ON THE DOWN STROKE. LATCH ONTO SV & PULL PUMP OFF SEAT. MIRU HOT OILER. FLUSH TBNG W/ 50 BBLS HOT TMAC / SOLVENT. RE-SEAT PUMP & BACK OFF OF SV. PUMP STILL STICKING. REPEAT FLUSH 2 MORE TIMES. PUMP IS SLOWLY CLEANING UP. CHEMICAL WAS CHANGED ON LAST JOB. DECIDE TO LET CHEMICAL WORK OVERNIGHT. SWIFN. SAFETY = JSA.
	7:15 - 8	30 1.25	COMP	39	P	SICP= 100#. SITP= 0#. LONG STROKE PUMP BUT
	9:20					STILL STICKING. LATCH ON TO SV W/ RODS & PLUNGER. PULL SV OFF SEAT. PUMP 10 BBLS TMAC TO MAKE SURE IT WAS RETREIVED. POOH W/ RODS, PLUNGER & SV. INSPECTED PLUNGER & SV AFTER POOH & FOUND THAT THE MANUFACTURER HAD INSTALLED THE VALVE ASSEMBLY ON THE PLUNGER UPSIDE DOWN.
	8:30 - 10	0:00 1.50	COMP	46	Р	WAIT ON PUMP COMPANY TO BRING OUT NEW
	10:00 - 10	0:30 0.50	COMP	40	Р	PLUNGER & SV ASSEMBLY. MIRU HOT OILER. FLUSH TBNG W/ 35 BBLS TMAC / SOLVENT. DROP SV. & PRESSURE TEST TBNG
	10:30 - 12	2:30 2.00	COMP	39	P	GOOD @ 1000#. RDMO HOT OILER.
	12:30 - 16		COMP	30	P	RIH W/ ROD STRING, SPACE OUT. STROKE TEST PUMP GOOD @ 1000#. LONG STROKE PUMP TO PIT FOR 30 MIN TO MAKE SURE IT WOULD STAY WORKING PROPERLY. HANG HORSE HEAD ON PUMP JACK. HANG OFF WELL. INSTALL PUMP OFF CONTROLLER LOAD CELL. INSTALL GUARDS ON THE PUMPING UNIT. PUMPING UNIT IS TOO FAR FORWARD, SO WAIT ON
						WEATHERFORD TO INSPECT THEIR MEASUREMENTS / OFFSETS. PUMPING UNIT WILL HAVE TO BE MOVED IN THE AM. R/D RIG SO THAT CRANE WORK CAN BE COMPLETED. SWIFN.

7/6/2012 11:17:23AM

					Opera	tion S	Summ:	ary Report			
Well: MAVERIC	< 921-26	B-HZ				3 . 155 ( <u>7</u>		Spud Date: 2/23/2012			
Project: UTAH-U	INTAH			Site: MA\	ÆRICK 9	21-26B-	HZ PAD	Rig Name No:			
Event: COMPLE	TION			Start Date	e: 4/26/20	12		End Date:			
Active Datum: Ri Level)	KB @4,9	31.00usft (ab	ove Mean Se	а	UWI: NW/NE/0/9/S/21/E/26/0/0/26/PM/N/681/E/0/1512/0/0						
Date	100 1 4000	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (usft)			
6/26/2012	7:00	- 7:15	0.25	COMP	48	<u> </u>	Р	SAFETY = JSA.			
	7:15	- 18:00	10.75	COMP	30		P	SICP= 100#, SITP= 0#. MIRU CRANE & ADJUST PUMP JACK. ADD 2' PONY ROD FOR SPACING. HANG OFF WELL. INSTALL PUMP OFF CONTROLLER. R/U FLOW LINES. BRING WELL ON LINE. MONITOR PUMP ACTION & WELL. WELL UNLOADED AFTER 30 MIN PUMPING. CONTINUE MONITORING THRU DAY. RODS LANDED AS FOLLOWS:  1-1/2" X 30' SPRAY METAL POLISHED ROD 7/8" X 2' S-88 PONY ROD W/ SM CPLNG 7/8" X 2' S-88 PONY ROD W/ SM CPLNG 7/8" X 4' S-88 PONY ROD W/ SM CPLNG 7/8" X 4' S-88 PONY ROD W/ SM CPLNG 7/8" X 8' S-88 PONY ROD W/ SM CPLNG 7/8" X 8' S-88 PONY ROD W/ SM CPLNG 153 3/4" HIGH TENSIL S-88 SUCKER RODS W/ SM CPLNGS. MOLD ON ROD GUIDES 3 PER ROD. =3825' 8 - 1-1/2" WEIGHT BARS. 200'			
								H-F 3.00' X 2.25" SM PLUNGER. TWLTR= 380 BBLS			

7/6/2012

Sundry Number: 33229 API Well Number: 43047520500000

	STATE OF UTAH				FORM 9
ı	DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS, AND MI		3		<b>DESIGNATION AND SERIAL NUMBER:</b> ML 22934
SUNDR	RY NOTICES AND REPORTS	ON	WELLS	6. IF IND	IAN, ALLOTTEE OR TRIBE NAME:
	posals to drill new wells, significantly reenter plugged wells, or to drill horiz n for such proposals.			7.UNIT o	r CA AGREEMENT NAME: ICK
1. TYPE OF WELL Gas Well				1 '	NAME and NUMBER: RICK 921-26B-HZ
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.			<b>9. API NU</b> 43047	JMBER: 520500000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th	h Street, Suite 600, Denver, CO, 8021		NE NUMBER: 720 929-6		and POOL or WILDCAT: AL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0681 FNL 1512 FEL				COUNTY	
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 26 Township: 09.0S Range: 21.0E Mei	ridian:	S	STATE: UTAH	
11. CHECI	K APPROPRIATE BOXES TO INDICA	ATE N	ATURE OF NOTICE, REPOR	RT, OR O	THER DATA
TYPE OF SUBMISSION			TYPE OF ACTION		
	ACIDIZE		ALTER CASING		CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS		CHANGE TUBING		CHANGE WELL NAME
Approximate date work will start.	CHANGE WELL STATUS		COMMINGLE PRODUCING FORMATIONS		CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	□ F	FRACTURE TREAT		NEW CONSTRUCTION
10/4/2012	OPERATOR CHANGE		PLUG AND ABANDON		PLUG BACK
SPUD REPORT	PRODUCTION START OR RESUME		RECLAMATION OF WELL SITE		RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION		SIDETRACK TO REPAIR WELL		TEMPORARY ABANDON
	TUBING REPAIR		/ENT OR FLARE	П	WATER DISPOSAL
DRILLING REPORT	WATER SHUTOFF		SI TA STATUS EXTENSION		APD EXTENSION
Report Date:		: 	SI TA STATUS EXTENSION		
	WILDCAT WELL DETERMINATION	<b>V</b>	OTHER		Workover
The operator cond the subject well on	COMPLETED OPERATIONS. Clearly show ucted the following workov 10/04/2012. Please see the rell history for details. Than	er/w e atta	ellbore cleanout on ached chronological	FOI	Accepted by the Utah Division of il, Gas and Mining R RECORD ONLY December 20, 2012
NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUM	BER	TITLE Regulartory Analyst		
SIGNATURE	720 929-6304		DATE		
N/A			12/20/2012		

				U	S ROC	KIES R	EGION			
				Opera	tion S	umma	ary Report			
Well: MAVERIC	K 921-26B-HZ						Spud Date: 2/2	23/2012		
Project: UTAH-L	JINTAH		Site: MA\	/ERICK 9	21-26B-l	HZ PAD		Rig Name No: SWABBCO 8/8, SWABBCO 8/8		
Event: WELL W	ORK EXPENSE		Start Date	e: 9/28/20	)12			End Date: 10/4/2012		
Active Datum: R Level)	RKB @4,931.00usft (a	bove Mean S	ea	UWI: NV	N/NE/0/9	/S/21/E/2	6/0/0/26/PM/N/68	1/E/0/1512/0/0		
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation		
9/28/2012	7:00 - 7:30	0.50	WO/REP	48		Р		HSM, WORKING W/ ROD EQUIP.		
10/1/2012	7:30 - 17:00 7:00 - 7:30	9.50	WO/REP	39	В	P		HOT OILER PUMPED 80 BBLS T-MAC WTR DWN CSG, TEST TBG TO 500 PSI OK. HAD TO WAIT ON MECANIC TO START GEN, TO ROLL PUMPING UNIT. TEAR DWN UNIT UNSEAT PUMP, FLUSH RODS W/40 BBLS T-MAC. L/D POLISH ROD, POOH W/2',8', 7/8 PONYS, 1-3/4 W/8 GUIEDS PER ROD, 153 3/4 W/3 - 21/2" GUIEDS PER ROD, 10 3/4 W/3 - 2" GUIEDS PER ROD,6-11/4 WEIGHT BARS INSPECTING SAME FOR WEAR, L/D PUMP NO WEAR. X/O EQUIP TO TBG, UNLAND TBG UNSET TBG ANCORE, RELAND TBG, NU X/O SPOOL & BOPS RU FLOOR & TBG EQUIP. UNLAND TBG L/D HANGER, POOH W/40 JTS 27/8 S.L.M. SWI SDFN. HSM, PULLING TBG.		
10/1/2012	7:30 - 11:00	3.50	WO/REP	31	1	Р				
	11:00 - 17:00	6.00	WO/REP	31	ı	Р		SICP 200 SITP 200, ATEMPT TO CIRC WELL W/ 160 BBLS T-MAC NO CIRC, POOH W/ REM 86 JTS 27/8, 7" ANCORE, 1 JTS 27/8, X/O, 9 JTS 23/8, PSN, PERF PUP, X/O, 1 JT 27/8, X/O, 23/8 PURG VALVE S.L.M.DRAGGING OIL OUT OF WELL. RU HOTOIL TRK WASH TONGS & SLIPS, PU N/C, 2 CHECK SUBS, X/O, 10 JTS 23/8 HYD, X/O, SAFETY		
10/0/00 10	7:00	0.50	W0/D5D	40				JT SUB, HIGH TECH BAILER, CHECK SUB, DRAIN SUB, X/O, 115 JTS 23/8 PH6 HYD TO 3901 'SWI SDFN.		
10/2/2012	7:00 - 7:30 7:30 - 17:00	0.50	WO/REP	48	N/	P P		HSM, WORKING W/ TOOL HAND.		
	7:30 - 17:00	9.50	WO/REP	31	М	۲		SICP 0, PU 153 JTS 23/8 HYD WORKING BAILER IN LINER, TAG UP ON JT 278 @ 8578' PBTD MD, STROKE BAILER SEVERAL TIMES NOTHING TAGGED, 14,000# PULL OVER ON DRAG L/D 154 JTS 23/8 PH6 HYD ON FLOAT. SWI SDFN.		
10/3/2012	7:00 - 7:30	0.50	WO/REP	48		Р		HSM, LAYING DOWN TBG & BAILER W/ TRAPPED PSI.		
	7:30 - 18:00	10.50	WO/REP	31	I	Р		SICP 0 PSI, L/D REM 124 JTS 23/8 PH6 HYD & BAILER, NO SAND IN CAVITY. PU RIH W/ PURG VALVE, 1 JT 23/8, 6' PERF'D 23/8 PUP, PSN, 18 JTS 23/8 23/8 J-55, INSTALLING BEVELED SLIM HOLE COLLARS, X/O, 1 JT 27/8, 7" ANCORE, 126 JTS 27/8 6.4 # J-55 LAND TBG, ND BOPS & SPOOL. UNLAND TBG REMOVE HANGER, SET ANCORE @ 3993.38' PULL UP LAND TBG W/ 10,000# TENSION. NU 71/16 10K SPOOL, SWI SDFN.		
10/4/2012	7:00 - 7:30	0.50	WO/REP	48		Р		HSM, RUNNING SUCKER RODS.		

12/19/2012 12:41:48PM 1

Sundry Number: 33229 API Well Number: 43047520500000 **US ROCKIES REGION Operation Summary Report** Spud Date: 2/23/2012 Well: MAVERICK 921-26B-HZ Project: UTAH-UINTAH Site: MAVERICK 921-26B-HZ PAD Rig Name No: SWABBCO 8/8, SWABBCO 8/8 Event: WELL WORK EXPENSE End Date: 10/4/2012 Start Date: 9/28/2012 UWI: NW/NE/0/9/S/21/E/26/0/0/26/PM/N/681/E/0/1512/0/0 Active Datum: RKB @4,931.00usft (above Mean Sea Date Phase P/U Time Duration Code Sub MD From Operation Start-End (hr) Code (usft) 7:30 - 18:00 10.50 WO/REP 39 Ρ SICP 0 SITP 0, FLUSH TBG W/ BBLS HOT WTR, RUN & L/D 6 WEIGHT BARS, PU PRIME PUMP, RIH W/ PUMP & RODS. SEAT & SPACE OUT PUMP, FILL TBG & STROKE TEST PUMP TO 600 PSI, CHANGE STROKE ON PUMPING UNIT, HANG HEAD & RODS, HAVING TROUBLE W/ KIMRAY ON TREATER FLOW LINE LEFT WELL PUMPING TO TANK FOR NIGHT SDFN. TBG KB = 14' 71/16 HANGER = 1.00' 126 JTS 27/8 6.4# J-55 EUE TBG = 3978.38' 7" SLIM HOLE TBG ANCORE 50,000# SHEAR = 2.85' (TOP @ 3993.38') 10,000# TENSION 1 JT 27/8 6.4# J-55 EUE TBG = 31.10' 23/8 X 27/8 X/O J-55 EUE = .63' 18 JTS 23/8 4.7# J-55 W/ SLIM HOLE COLLARS = 23/8 PSN = 1.10' ( TOP @ 4623.52') 23/8 PERF SUB = 6.08' 1 JT 23/8 4.7# J-55 FOR MUD ANCORE = 28.70' PURG VALVE = .79' EOT @ 4660.19' (425 TWTR) RODS KB = 14' 11/2 X 30' SM POLISH ROD 1-2' X 7/8 PONY 1-4' X 7/8 PONY 153 S-88 3/4, 3 GUIEDS PER ROD 21/2" GUIEDS, TOP ROD W/ 2" GUIEDS. 28 S-88 3/4, 3 GUIEDS PER ROD 2". 1-7/8 X 1.50' STABILIZER PONY 2" X 11/2" X 22' RXBC 2 STG, HVR, MAX STROKE 177" PMP # AD09 BTM HOLD DWN, HF PUMP W/ 20'

12/19/2012 12:41:48PM 2

1' DIP TUBE.

RECEIVED: Dec. 20, 2012

### STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

## **ENTITY ACTION FORM**

Operator:

KERR McGEE OIL & GAS ONSHORE LP

Operator Account Number: N 2995

Address:

P.O. BOX 173779

city\_DENVER

state CO

zip 80217

Phone Number: (435) 781-9758

W	/el	I 1

API Number	Well h	Name	QQ	Sec	Twp	Rng	County
4304734420	NATURAL COTTON S	52-28	SWNE	28	98	21E	UINTAH
Action Code	Current Entity Number	New Entity Number	S	pud Da	te		y Assignment fective Date
D	13416	19013					1/12/2013

Well 2

		NWSW	20			
		1445244	26 9S	21E UINTAH		
nt Entity mber	New Entity Number	Sı	oud Dat	te	Entity Assignme Effective Date	
3160	19279					2/1/2013
	mber 8160	mber Number	mber Number	mber Number	mber Number	mber Number Eff

Wall 3

API Number	Well I	Name	QQ	Sec	Twp	Rng	County		
4304752050	MAVERICK 921-26B-	NWNE	26	98	21E	UINTAH			
Action Code	Current Entity Number	New Entity Number	S	Spud Date			Entity Assignment Effective Date		
D	18433	19279					2/1/2013		

**ACTION CODES:** 

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
- D Re-assign well from one existing entity to hew entity
- E Other (Explain in 'comments' section)

DEC 24 2013

Dore	en Gre	en
Name (	(Please	Printy

Signature

Regulatory Analyst

12/23/2013

Title

Date

Sundry Number: 59292 API Well Number: 43047520500000

	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCE		FORM 9
ı	ES IING	5.LEASE DESIGNATION AND SERIAL NUMBER: UT ST ML 22934	
SUNDR	Y NOTICES AND REPORTS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
Do not use this form for pro current bottom-hole depth, I FOR PERMIT TO DRILL form	7.UNIT or CA AGREEMENT NAME: MAVERICK		
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: MAVERICK 921-26B-HZ		
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.		9. API NUMBER: 43047520500000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th	n Street, Suite 600, Denver, CO, 80217	<b>PHONE NUMBER:</b> 73779 720 929-	9. FIELD and POOL or WILDCAT: 1NATERAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0681 FNL 1512 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NWNE Section: 2	HIP, RANGE, MERIDIAN: 26 Township: 09.0S Range: 21.0E Merio	dian: S	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
Approximate date work will start.	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION
12/4/2014	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT	✓ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
Report Date.		STASTATUS EXTENSION	
	WILDCAT WELL DETERMINATION	OTHER	OTHER:
	COMPLETED OPERATIONS. Clearly show a 1-26B-HZ WAS SI AND RETUF ON 12/04/2014. THANK YO	RNED TO PRODUCTION	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY December 30, 2014
NAME (PLEASE PRINT)	PHONE NUMB	ER   TITLE	
Kay E. Kelly	720 929 6582	Regulatory Analyst	
SIGNATURE N/A		<b>DATE</b> 12/29/2014	

ND SERIAL NUMBER:
OR TRIBE NAME:
IT NAME:
BER: HZ
LDCAT:
ns of Approval
1 3 E 1 R C



### The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

### Sundry Conditions of Approval Well Number 43047520500000

Notify the Division at least 24 hours prior to conducting abandonment operations. Please call Dan Jarvis at 801-538-5338.
 Amend Plug #4. Spot 200' plug (+/- 40 sx) from 2800'-2600' in accordance with Board Cause 190-5(B).
 All balanced plugs shall be tagged to ensure that they are at the depth specified.
 All annuli shall be cemented from a minimum depth of 100' to the surface.
 Surface reclamation shall be done in accordance with R649-3-34 – Well Site Restoration.
 All requirements in the Oil and Gas Conservation General Rule R649-3-24 shall apply.
 If there are any changes to the procedure or the wellbore configuration, notify Dustin Doucet at 801-538-5281 (office) or 801-733-0983 (home) prior to continuing with the procedure.
 All other requirements for notice and reporting in the Oil and Gas Conservation General Rules shall apply.

TD:

8600 TVD:

4585 PBTD:

8600

Wellbore Diagram

**API Well No:** 43-047-52050-00-00 Well Name/No: MAVERICK 921-26B-HZ Permit No: Company Name: KERR-MCGEE OIL & GAS ONSHORE, L.P. Location: Sec: 26 T: 9S R: 21E Spot: NWNE **String Information Bottom** Diameter Weight Length **Coordinates:** X: 626752 Y: 4430185 String (ft sub) (inches) (lb/ft) (ft) Field Name: NATURAL BUTTES HOL1 40 20 County Name: UINTAH COND 40 14 36.7 HOL2 2662 12.25 Ploy the SURF HOL3 835-X(1.57)(4.655) PROD 2662 9.625 36 5053 8.75 Cement from 40 ft. to surface 4.655 5053 7 26 Hole: 20 in. @ 40 ft. HOL4 8590 6.125 Cement from 2662 ft. to surface 11.459 L1 8590 4.5 11.6 Conductor: 14 in. @ 40 ft. T1 4311 2.375 300 Plug #5 910 1 (LIS)(4,658)= 910 1 TOLE 1395 JOUL. BMSOW 395 Hole: 12.25 in. @ 2662 ft. **Cement Information** Cement from 5053 ft. to surface (218 BOC TOC 2305 ace: 9.625 in. @ 2662 ft. GRAV String Class Sacks (ft sub) (ft sub) 2202 2001 fr 2800' to 2600 COND 40 0 UK 28 MHGBN 200/(1,15)(4,655)= 0 520 **PROD** 5053 UK SURF UK 600 2662 2750 2800 PARCK Hole: 8.75 in. @ 5053 ft. (1354) (1.15) (4.655) = 70 1056 Liner from 8590 ft. to 4126 ft. TOCE 4056 /OR Tubing: 2.375 in. @ 4311 ft **Perforation Information** 4600 **Bottom** Top Shts/Ft No Shts Dt Squeeze (ft sub) JTEB+ 4756 8422 Plugt 1

(451)(1.15)(11.454) = 521

Toce 5123 05229 **Formation Information** Formation **Depth BMSW** 300 **GRRV** 1518 **MHGBN** 2202 UTEBT PAULCK BASE 2750 Hole: 6.125 in. @ 8590 ft. Hole: Unknown 8422'

Maverick 921-26B-HZ 681' FNL & 1512' FEL NWNE SEC. 26, T9S, R21E Uintah County, UT

GL: 4917'

**KB:** 4931' **API NUMBER:** 4304752050 **TVD:** 4586' **LEASE NUMBER:** UT ST ML 22934

**MD:** 8600' **PBTD:** 8590'

CASING: 20" Hole

14", 36.7 STL @ 40' Cemented with 28 sx.

Top Cement Surface (after top out)

12.25" Hole

9.625", 36#, J-55 @ 2662' Cemented with 600 sx. TOC @ Surface (From CBL)

8.75" Hole

7", 26#, P-110 @ 5053' Cemented with 520 sx.

6.125" Hole

4.5", 11.6#, P-110 @ 4126' - 8590''

TUBING: 2.875"6.4# J-55 EUE @ 3993'

TAC @ 3996'

2.375" 4.7# J-55 EUE @ 3993'-4660' with purge valve at end

Tubular/Borehole	Drift	Collapse	Burst psi	Capacities			
	inches	psi		Gal./ft.	Cuft/ft.	Bbl./ft.	
2.375" 4.7# J-55 tbg.	1.901	8100	7700	0.1624	0.0217	0.0039	
2.875" 6.4# J-55 tbg.	2.347	7680	7260	0.2431	0.0325	0.0058	
4.5" 11.6# P-110 liner	3.875	7580	10690	0.6528	0.0873	0.0155	
7" 26# P-110 csg	6.151	6230	9950	1.6070	0.2148	0.0383	
Annular Capacities							
2.375" tbg. X 4 ½" 11.6#	liner			0.4227	0.0565	0.0101	
2.375" tbg X 7" 26# csg				1.3769	0.1841	0.0328	
2.875" tbg. X 7" 26# csg				1.2698	0.0302		
4.5" 11.6# Liner X 7" 26	# csg			0.7808	0.1044	0.0186	
7" 29# csg X 9.625" 36#	csg X 9.625" 36# csg 1.2478			0.1668	0.0297		
4.5" 11.6# Liner X 6.125	" Borehole	(10% excess	s)	0.07749	0.1036	0.0184	
7" 29# csg X 8.75" Borel	nole (10% e	excess)		1.2370	0.1654	0.0295	
9.625" 36# csg X 12.25"	12.25" Borehole (10% excess)			2.5771	0.3445	0.0614	

#### GEOLOGIC INFORMATION:

Formation Depth to top, ft.

Uinta Surface
Green River 1518'
Birds Nest 1719'
Mahogany 2202'
Uteland Butte 4700'

#### http://geologv.utah.gov/online/ss/ss-144/ss-144pl1.pdf

USDW Elevation ~4600' MSL USDW Depth ~331' KBL

#### PERFORATIONS:

**Formation Top, MD Base, MD** Green River 5229' 8422'

#### **GENERAL**

- H2S MAY BE PRESENT. CHECK FOR H2S AND TAKE APPROPRIATE PRECAUTIONS.
- CEMENT QUANTITIES BELOW ASSUME NEAT CLASS G, YIELD 1.145 CUFT./SX. IF A DIFFERENT PRODUCT IS USED, WELLSITE PERSONNEL ARE RESONSIBLE FOR CORRECTING QUANTITIES TO YIELD THE STATED SLURRY VOLUME. WHEN SQUEEZING, INCLUDE 10% EXCESS PER 1000' OF DEPTH.
- TREATED FRESH WATER WILL BE PLACED BETWEEN ALL PLUGS INSTEAD OF BRINE.
- ALL DISPLACEMENT FLUID SHALL CONTAIN CORROSION INHIBITOR AND BIOCIDE. PREMIX 5 GALLONS PER 100 BBLS FLUID.
- NOTIFY APPROPRIATE AGENCY 24 HOURS BEFORE MOVING ON LOCATION.
- A GPS READING WILL NEED TO BE TAKEN AT THE WELL SITE AND RECORDED IN OPENWELLS. PLEASE TAKE IT TO THE 6TH DECIMAL PLACE.

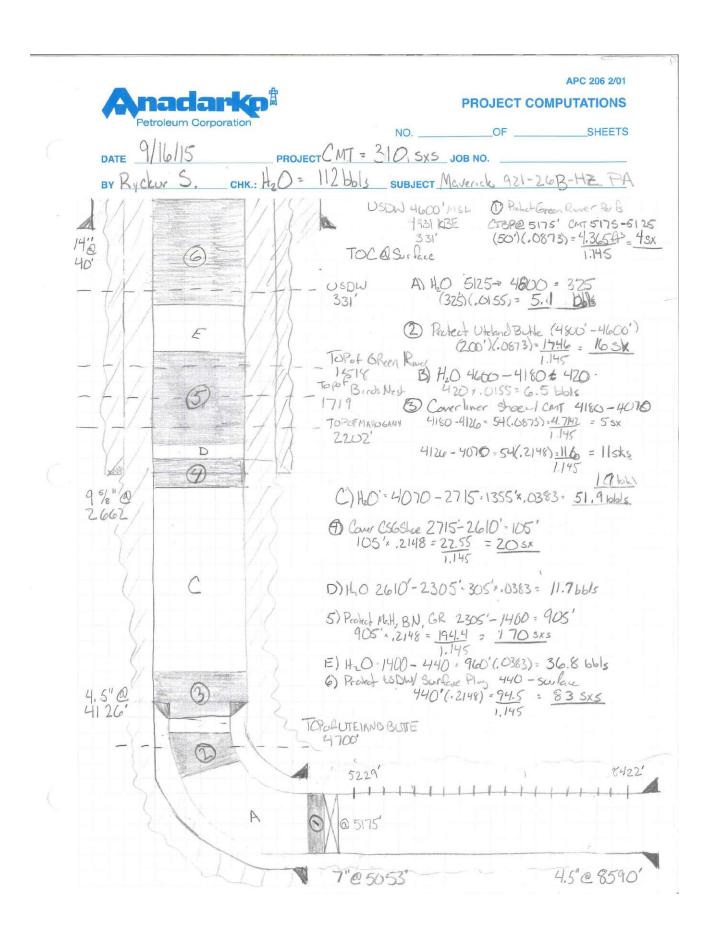
#### PROCEDURE (please see diagram on last page)

Note: Approx. 310 sks Class "G" cement needed for procedure & (1) 4.5" CIBP Note: No Gyro needed, Directional Survey done by Weatherford on 9/13/13.

- 1. A GPS READING WILL NEED TO BE TAKEN AT THE WELL SITE AND RECORDED IN OPENWELLS. PLEASE TAKE IT TO THE 6TH DECIMAL PLACE.
- 2. MIRU. KILL WELL AS NEEDED. ND WH, NU AND TEST BOPE.
- 3. RU WIRELINE AND MAKE A GAUGE RING RUN TO CHECK FOR FILL ON 7" CSG.
- 4. PLUG #1, ISOLATE GREEN RIVER PERFORATIONS (5229' 8422'): RIH W/ 4 ½" CIBP. SET @ ~5175'. RELEASE CIBP, PUH 10', BRK CIRC W/ TREATED FRESH WATER. DISPLACE A MINIMUM OF 4.365 FT3 / 4 SX ON TOP OF PLUG. PUH ABOVE TOC (~5125'). REVERSE CIRCULATE W/ TREATED WATER (~5.1 BBLS).
- 5. PLUG #2, PROTECT TOP OF UTELAND BUTTE (4700'): PUH TO ~4800'. BRK CIRC W/ FRESH WATER. DISPLACE 17.46 FT3/ 16 SX AND BALANCE PLUG W/ TOC @ ~4600'(200' of cover). PUH ABOVE TOC. REVERSE CIRCULATE W/ TREATED WATER (6.5 BBLS)
- 6. PLUG #3, PROTECT LINER TOP' (4126'): PUH TO ~4180'. BRK CIRC W/ FRESH WATER. DISPLACE 16.3 FT3/ 17 SX AND BALANCE PLUG W/ TOC @ ~4070 (110' of cover). PUH ABOVE TOC. REVERSE CIRCULATE W/ TREATED WATER (51.9 BBLS).

- 7. PLUG #4, PROTECT 9" CASING SHOE (2662'): PUH TO ~2715'. BRK CIRC W/ FRESH WATER. DISPLACE 22.55 FT3/ 20 SX AND BALANCE PLUG W/ TOC @ ~2610 (105' of cover). PUH ABOVE TOC. REVERSE CIRCULATE W/ TREATED WATER (11.7 BBLS).
- 8. PLUG #5, PROTECT TOP OF MAHOGANY (2202'), BIRDS NEST (1719'), & GREEN RIVER (1518'): PUH TO ~2305'. BRK CIRC W/ FRESH WATER. DISPLACE 194.4 FT3/ 170 SX AND BALANCE PLUG W/ TOC @ ~1400 (905' of cover). PUH ABOVE TOC. REVERSE CIRCULATE W/ TREATED WATER (36.8 BBLS).
- 9. PLUG #6, PROTECT USDW (~331') AND SURFACE HOLE: POOH. HOOK UP 1" PIPE AND PUMP 94.5 FT3/ 83 SX OR SUFFICIENT VOLUME TO FILL 7" CASING F/ 440' TO SURFACE.
- 10. INSTALL MARKER PER REGULATIONS.
- 11. RDMO. TURN OVER TO OPERATIONS FOR SURFACE REHAB. SURFACE RECLAMATION TO BE PERFORMED IN ACCORDANCE TO REGULATIONS.

RS 9/24/15





# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA

Division Director

February 2, 2016

CERTIFIED MAIL NO. 7014 2870 0001 4232 4887

Mr. Joel Malefyte Kerr-McGee Oil and Gas Onshore PO Box 173779 Denver, CO 80217-3779

Subject: Extended Shut-in and Temporary Abandoned Well Requirements for Fee or State Leases

Dear Mr. Malefyte:

As of January 2016, Emery Kerr-McGee Oil and Gas Onshore has three (3) State Lease Wells (see attachment A) that are currently in non-compliance with the requirements for extended shut-in or temporarily abandoned (SI/TA) status.

Wells SI/TA beyond twelve (12) consecutive months requires filing a Sundry Notice (R649-3-36-1). Wells with five (5) years non-activity or non-productivity shall be plugged, unless the Division grants approval for extended shut-in time upon a showing of good cause by the operator (649-3-36-1.3.3). For extended SI/TA consideration the operator shall provide the Utah Division of Oil, Gas & Mining with the following:

- 1. Reasons for SI/TA of the well (R649-3-36-1.1).
- 2. The length of time the well is expected to be SI/TA (R649-3-36-1.2), and
- 3. An explanation and supporting data if necessary, for showing the well has integrity, meaning that the casing, cement, equipment condition, static fluid level, pressure, existence or absence of Underground Sources of Drinking Water and other factors do not make the well a risk to public health and safety or the environment (R649-3-36-1.3).

Please note that the Divisions preferred method for showing well integrity is by MIT.



Page 2 Kerr-McGee Oil and Gas Onshore February 2, 2016

Submitting the information suggested below may help show well integrity and may help qualify your well for extended SI/TA. Note: As of July 1, 2003, wells in violation of the SI/TA rule R649-3-36 may be subject to full cost bonding (R649-3-1-4.2, 4.3).

- 1. Wellbore diagram, and
- 2. Copy of recent casing pressure test, and
- 3. Current pressures on the wellbore (tubing pressure, casing pressure, and casing/casing annuli pressure) showing wellbore has integrity, and
- 4. Fluid level in the wellbore, and
- 5. An explanation of how the submitted information proves integrity.

## All Submittals should be sent via ePermit

If the required information is not received within 30 days of the date of this notice, further actions may be initiated. If you have any questions concerning this matter, please contact me at (801) 538-5281.

Sincerely,

Dustin K. Doucet Petroleum Engineer

DKD/DD/js

cc: LaVonne Garrison, SITLA Compliance File Well File

N:\O&G Reviewed Docs\ChronFile\PetroleumEngineer\SITA

# ATTACHMENT A

	Well Name	API	LEASE	Years Inactive
1	NBU 921-35H1CS	43-047-51366	ML 22582	1 year 7 months
2	NBU 921-35H4BS	43-047-51367	ML 22582	1 year 7 months
3	Maverick 921-26B-HZ	43-047-52050	UT ST ML22934	1 year 7 months

Sundry Number: 72479 API Well Number: 43047520500000

	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCE		FORM 9
	ES ING	5.LEASE DESIGNATION AND SERIAL NUMBER: UT ST ML 22934	
SUNDR	RY NOTICES AND REPORTS (	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for procurrent bottom-hole depth, FOR PERMIT TO DRILL form	7.UNIT or CA AGREEMENT NAME: MAVERICK		
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: MAVERICK 921-26B-HZ		
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	SHORE, L.P.		9. API NUMBER: 43047520500000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18tl	h Street, Suite 600, Denver, CO, 80217	<b>PHONE NUMBER:</b> 3779 720 929-0	9. FIELD and POOL or WILDCAT: 456 TURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0681 FNL 1512 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: NWNE Section:	ian: S	STATE: UTAH	
11. CHEC	K APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
Approximate date work will start:	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	New construction
6/10/2016		✓ PLUG AND ABANDON	PLUG BACK
	OPERATOR CHANGE		
SPUD REPORT Date of Spud:	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
DRILLING REPORT	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL
Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
	WILDCAT WELL DETERMINATION	OTHER	OTHER:
Kerr-McGee Oil & MAVERICK 921-26	COMPLETED OPERATIONS. Clearly show a Gas Onshore, LP has plugge B-HZ well on 6/10/2016. Pleanmary report for details. Tha	ed and abandoned the ase see the operations	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY June 22, 2016
NAME (PLEASE PRINT) Candice Barber	<b>PHONE NUMBE</b> 435 781-9749	TITLE HSE Representative	
SIGNATURE N/A		<b>DATE</b> 6/21/2016	
/ / 1		U/ = 1/ = U 1 U	

Sundry Number: 72479 API Well Number: 43047520500000

US ROCKIES REGION									
Operation Summary Report									
Well: MAVERICK 921-26B-HZ Spud date: 2/23/2012									
Project: UTAH-U	INTAH			Site: MAV	ERICK 9	21-26B-I	HZ PAD		Rig name no.: MILES-GRAY 1/1
Event: ABANDO	NMENT			Start date	: 6/6/201	6			End date:
Active datum: Rh Level)	KB @4,931	I.00usft (ab	ove Mean Se	a	UWI: NV	V/NE/0/9	9/S/21/E/2	6/0/0/26/PM/N/68	81/E/0/1512/0/0
Date		ime t-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation
6/6/2016	7:00		0.25	ABANDP	48	В		•	SAFETY JSA
	7:15	- 9:30	2.25	ABANDP					SICP= 150#. SITP= 20#. BLOW DOWN WELL TO FLOWBACK TANK. FINISH SPOTTING IN EQUIP. MIRU .
		- 10:30	1.00	ABANDP					L/D LUFKIN HYD PUMP JACK.
	10:30		3.50	ABANDP					TRY TO UNSEAT PUMP TO FLUSH RODS AND TBNG. TOO WAXY & NO MOVEMENT IN ROD STRING. MIRU HOT OILER. PRE-HEAT / FLUSH CSG W/ 100BBLS HOT TMAC UNTIL WE GOT MOVEMENT IN ROD STRING. TRY TO UN-SEAT PUMP WHILE HEATING CSG W/ HOT OILER. WORK PUMP UNTIL IT CAME OFF SEAT. L/D I2) -3/4" SUCKER RODS. R/U HOT OILER TO TBNG AND FLUSH RODS W/ 35BBLS HOT TMAC.
	14:00	- 17:00	3.00	ABANDP					POOH WHILE L/D ENTIRE ROD STRING AS FOLLOWS: 1-1/2" X 26' POLISHED ROD 1) 7/8" X 2' PONY ROD 181) AXELSON S-88 GUIDED 3/4" SUCKER RODS. 1) 7/8" X2' STABALIZER BAR. 1) INSERT PUMP. 2STG HVR. BHD W/ DIP TUBE. SWIFN. SDFN.
6/7/2016	7:00	- 7:15	0.25	ABANDP	48	В			SAFETY=JSA

6/21/2016 12:48:16PM 1

Sundry	Number: '	72479	APT We	7]] N	Jumbe	<u>r: 4</u>	3047520	500000	
US ROCKIES REGION									
Operation Summary Report									
Well: MAVERICK	921-26B-HZ						Spud date: 2/2	3/2012	
Project: UTAH-UI	NTAH		Site: MAV	/ERICK 9	21-26B-H	HZ PAD		Rig name no.: MILES-GRAY 1/1	
Event: ABANDOI	NMENT		Start date	e: 6/6/201	6			End date:	
Active datum: RK Level)	(B @4,931.00usft (ab	ove Mean Se	ea	UWI: N	W/NE/0/9	/S/21/E/26	6/0/0/26/PM/N/68	31/E/0/1512/0/0	
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD from (usft)	Operation	
	7:15 - 17:00	9.75	ABANDP					SICP= 50#. SITP= 0#. CNTRL WELL. MIRU HOT OILER. FLUSH TBG W/30BBLS HOT TMAC. NDWH. FUNCTION TEST BOP. UN-LAND TBG. TRY TO RELEASE TAC BUT WOULD NOT RELEASE. TAC SHEARED @ 50,000#.  ROTATE TAC UNTIL FREE MOVEMENT IN TBNG STRING. LAND TBG ON HANGER. NUBOP. R/U FLOOR & TBG EQUIP. UN-LAND TBG. RMV HNGR. MIRU SCANNERS. POOH WHILE SCAN TBNG. TAC WAS HANGING UP IN EVERY SINGLE CSNG COLLAR. HAD TO ROTATE THRU EVERY COLLAR WHILE POOH. CSNG WAS SWABBING BACK HEAVY OIL. R/U HOT OILER & PUMP DOWN CSNG WHILE POOH W/ TBNG. POOH WHILE SCANNING 127JT 2-7/8" J-55TBNG & 19JTS 2-3/8" J-55 TBNG + ROD PUMP BHA. L/D ALL TBNG. SCAN RESULTS AS FOLLOWS:  126JTS 2-7/8" J-55 Y-BND TBNG 1JT 2-7/8" J-55 R-BND TBNG (ROD CUT)  19JTS 2-3/8" J-55 R-BND TBNG (ROD CUT)  SWIFN. LOCK RAMS. SDFN.  NOTE: TAC WAS SHEARED BUT TRASH IN THE TOOL KEPT IT FROM RELAXING. HOT OILER PUMPED 200BBLS TTL FLUID.	
6/8/2016	-								
6/9/2016	7:00 - 7:15	0.25	ABANDP	48	В			HSM JSA	

6/21/2016 12:48:16PM 2

RECEIVED: Jun. 21, 2016

Sundry Number: 72479 API Well Number: 43047520500000 **US ROCKIES REGION Operation Summary Report** Well: MAVERICK 921-26B-HZ Spud date: 2/23/2012 Project: UTAH-UINTAH Site: MAVERICK 921-26B-HZ PAD Rig name no.: MILES-GRAY 1/1 **Event: ABANDONMENT** End date: Start date: 6/6/2016 UWI: NW/NE/0/9/S/21/E/26/0/0/26/PM/N/681/E/0/1512/0/0 Active datum: RKB @4,931.00usft (above Mean Sea P/U Date Time Duration Phase Code Sub MD from Operation Start-End (hr) Code (usft) 7:15 - 19:00 11.75 **ABANDP** SICP= 0#. SITP= 0#. POOH WHIL STND BACK 163JTS 2-3/8" P-110 TBNG L/D 7" CSNG SCRAPER & CIBP SETTING TOOL. P/U & RIH W/ 7" PCKR + 130 JTS 2-3/8" P-110 TBNG. T/U ON 4-1/2" LINER TOP @ 4126'. PUH TO 4116'. SET 7" PCKR. PUMP DOWN THE TBNG (BELOW PACKER). WOULD NOT PRESSURE TEST, PUMPING 1BPM @ 500#. R/U & PUMP DOWN THE 7" PRODUCTION CSNG (ABOVE PCKR TO SURFACE). PRESSURE TEST GOOD ( LOST 0# IN 15MIN). BLEED OFF PRESSURE. RELEASE PCKR. MIRU HOT OILER. FLUSH TBNG W/ HOT TMAC WHILE POOH. POOH WHILE STD BACK 130JTS 2-3/8" P-110 TBNG. L/D PCKR. NOTE: DUSTIN DUCET W/ DOGM WAS CONTACTED BY ROBERT MILLER (APC) AND NOTIFIED OF THE PRESSURE TEST FINDINGS. DUSTIN GAVE APROVAL TO SPOT CMT ON THE 4-1/2" CIBP @ 5175'. THEN SET 7" CICR ABOVE LINER TOP. DUSTIN WANTED +/- 20SX CMT SQZD BELOW CICR AND CMT SPOTTED ON TOP OF CICR. DUSTIN ALSO GAVE APROVAL TO AMEND PLUG #5 AND SET A BALANCED PLUG ACROSS THE GREEN RIVER INTERVAL ONLY. TIH W/ 2-3/8" N.C. + 163JTS 2-3/8" P-110 TBNG. T/U ON CIBP @ 5175'. PUH 10'. MIRU CMT CREW. PUMP 2BBL FRESH WATER LEAD DOWN TBG MIX AND PUMP 10SX 15.8# NEAT G CMT. DISPLACE W/ 2BBLS FRESH WATER & 20BBLS TMAC. R/D CMT CREW. POOH WHILE L/D 33JTS 2-3/8" P-110 TBNG NOT NEEDED FOR NEXT CMT STG. CONT POOH WHILE STD BACK REM OF TBNG. P/U & TIH W/ 7" WF CICR. SET CICR @4116'. STING OUT OF CICR. CIRC WELLBORE CLEAN W/ 150 BBLS HOT TMAC UNTIL RETURNS WERE CLEAN. PRESSURE TEST 7" CSNG GOOD @ 1000#. LOST 0 PSI IN 15MIN. BLEED OFF PRESSURE.SWIFN. LOCK RAMS. SDFN.

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- 7:15

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**ABANDP** 

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Sundry Number: 72479 API Well Number: 43047520500000 **US ROCKIES REGION Operation Summary Report** Well: MAVERICK 921-26B-HZ Spud date: 2/23/2012 Rig name no.: MILES-GRAY 1/1 Project: UTAH-UINTAH Site: MAVERICK 921-26B-HZ PAD **Event: ABANDONMENT** End date: Start date: 6/6/2016 UWI: NW/NE/0/9/S/21/E/26/0/0/26/PM/N/681/E/0/1512/0/0 Active datum: RKB @4,931.00usft (above Mean Sea P/U Date Time Duration Phase Code Sub MD from Operation Start-End (hr) Code (usft) 7:15 - 15:00 7.75 **ABANDP** 0# ON WELL. RICHARD POWELL W/ STATE OF UTAH ON LOCATION WANTED TO WITNESS PRESSURE TEST ON 7" CSNG. STING OUT OF CICR. BREAK CONV CIRC. PRESSURE TEST 7" PRODUCTION CSNG @ 1000#. NO VISIBLE PRESSURE LOSS IN 15 MIN. MIRU CMT CREW. STING INTO CICR. EST INJ RATE OF3BPM @ 280PSI W/ FRESH WATER. PUMP 15.8# NEAT "G" CMT PLUGS AS FOLLOWS: #1. 7" CICR @ 4116'. PUMP 2BBL FRESH WATER LEAD. PUMP 20 SX CMT BELOW CICR. STING OUT OF CICR & SPOT 10SX CMT ON TOP OF CICR. DISPLACE W/ 1.7 BBLS TMAC. 105' CMT BELOW CICR. 50' CMT ON TOP OF CICR. CMT BTTM4221'. CICR 4116' TO 4119'. CMT TOP @4066'. PUH TBNG TO 2800' #2. EOT @2800'. BREAK CONV CIRC. PUMP 2BBL FRESH WATER LEAD. PUMP 40SX CMT. DISPLACE W/9.4BBLS TMAC. CMT PLUG 2800' TO 2586'. PUH TBNG TO 1618'. #3. EOT @1618'. PUMP 2BBL FRESH WATER LEAD. PUMP 40SX CMT. DISPLACE W/ 4.8BBLS TMAC. CMT PLUG 1618' TO 1404'. PUH TBNG TO 440'. #4. EOT @ 440'. PUMP 2BBL FRESH WATER LEAD. PUMP 50SX CMT. DISPLACE W/ .5BBLS TMAC. CMT PLUG 440' TO 173'. PUH TBNG TO 105'. #5 EOT @105. PUMP.5BBLS FRESH WATER LEAD. PUMP 20SX CMT UNTIL GOOD CMT IN RETURNS. POOH TBNG & TOP OFF 7" CSNG. CMT 105' TO SURFACE. RDMO SERVICE RIG. MIRU ROUSTABOUT. EXPOSE WELLHEAD. CUT & LOWER WELLHEAD. 7" CSNG FULL OF CMT. SURFACE CSNG CMT @ 10' FROM SURFACE & NOT ENOUGE SPACE OT 1" ANNULUS. INSTALL MARKER PLATE. BACK FILL WELLHEAD. P&A COMPLETE. WELLHEAD COORDINATES:

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US ROCKIES REGION									
Operation Summary Report									
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Project: UTAH-U	INTAH		Site: MAV	ERICK 921-26B-HZ PAD				Rig name no.: MILES-GRAY 1/1	
Event: ABANDO	NMENT		Start date	e: 6/6/2016				End date:	
Active datum: RKB @4,931.00usft (above Mean Sea Level)					UWI: NW/NE/0/9/S/21/E/26/0/0/26/PM/N/681/E/0/1512/0/0				
Date	Time	Duration	Phase	Code	Sub	P/U	MD from	Operation	
	Start-End	(hr)			Code		(usft)		
LAT: 40.012395									

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